# RAILROAD

AUGUST, 1970 MAGAZINE FIFTY CENTS

# Travel in Luxury by PLANE Car, Bus or Train

# CARRY ON 2-SUITER FLIGHT BAG

**SAVE UP TO AN HOUR OF YOUR VALUABLE TIME— NOW! LUGGAGE FOR EVERYONE**

- **No annoying wait for baggage at your destination. You're on your way immediately after deplaning.**
- **Made of genuine PERMALON the miracle material that looks and feels like elegant leather—lasts longer.**

New 2 Suiter fits under airline seat. Perfect for travel by air, car, bus or train. Suits, shirts, shoes, ties, underwear and more. Everything you need for overnight or up to a week's travel. Compact and efficient. Hanger frames are guaranteed to pack 2 suits wrinkle free. Soft side expanding pockets keep shirts pressed, carry shoes and everything you need for travel.

**NO WAITING AT CHECK-IN COUNTER**

**FITS UNDER YOUR SEAT**

**FREE! TWO Bonus GIFTS!**
**(1) Personalized Initials (2) Utility Kit**

**100% SATISFACTION OR MONEY BACK!**

**NOW ONLY $12.95 COMPLETE**

**BONUS**
Your own personal initials to easily identify your luggage.

**Another BONUS GIFT!**

Zippered, fully lined toilet kit for men's shaving accessories or ladies' cosmetics and makeup, fits outside pockets.

**HOLDS ALL YOUR TRAVEL NEEDS**

Your suits hang wrinkle free — ready-to-wear. Three jumbo expanding side pockets have full strong zipper for easy access and closing. Padlock and key for safety—is 22" x13"x10". Made of long lasting PERMALON material that looks like, yet outwears leather. Plenty of room for shoes, bulky boxes, gifts, etc. Ideal for businessman, salesman, students and all travelers.

NIRESK INDUSTRIES, Inc.
210 South Des Plaines Street • Chicago, Illinois 60606

**MONEY BACK GUARANTEE**

**NIRESK INDUSTRIES, INC., Dept. LBR-2**
**210 South Des Plaines Street • Chicago, Illinois 60606**

Gentlemen:

Kindly send me the following all purpose flight bags, including my Bonus Gifts, at $12.95 each, plus $1.00 postage. If I am not completely satisfied I may return for a full refund.

☐ Jet Black ☐ Dark Brown

Name_____

Address_____

City_____ State_____ Zip_____

☐ I enclose $12.95 plus $1.00 Postage and Handling.
☐ Ship C.O.D. plus Postage. I enclose $1.00 deposit.
☐ Charge to my Diners Club #_____

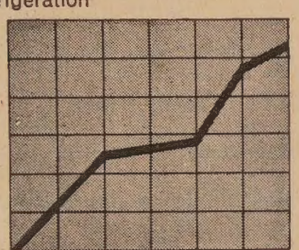
Initials_____

# ADULTS ONLY

If you've been out of school for awhile . . . have growing job and family responsibilities . . . feel the need for additional training in a specialized field and wonder how to manage it . . . here are home-study programs worth considering . . . and below, there's the coupon that brings you full information—FREE.

**ACCOUNTING**
Accounting (U.S. or Can.)
Cost Accounting
General Accounting
Practical Accounting
Public Accounting

**ARCHITECTURE and BUILDING TRADES**
Air Conditioning
Air Conditioning Maint.
Architecture
Arch. Drawing & Design
Building Contractor
Carpenter-Builder
Carpentry & Millwork
Heating & Air Conditioning with Drawing
House Planning, Int. Design
Plumbing
Plumbing & Heating
Reading Arch. Blueprints
Refrigeration




point where you begin ICS studies

**ART and DESIGN**
Commercial Art
Commercial Cartooning
Interior Decorating
Sign Painting & Design
Sketching & Painting

**AUTOMOTIVE**
Auto Body Rebuilding & Refinishing
Auto Mechanic-Techn.
Diesel-Gas-Motor Vehicle Engines
Auto. Electrical Techn.
Engine Tune-Up
Transmission Specialist

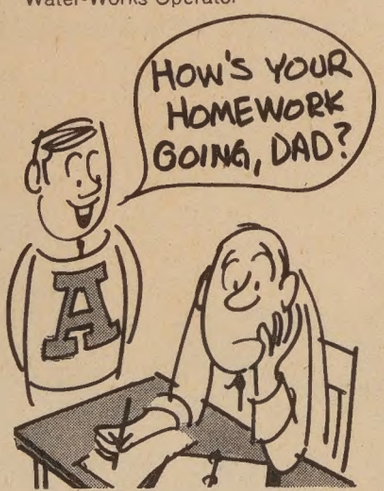
**BUSINESS**
Advertising
Business Administration
Business Law
Industrial Psychology
Inventory Control
Managing a Small Store
Personnel-Labor Relations
Purchasing Agent
Retail Business Management
Traffic Management

**BUSINESS: SALES**
Creative Salesmanship
Real Estate Sales
Sales & Sales Management

APPROVED FOR VETERANS
FOR TUITION REFUND UNDER NEW G.I. BILL

**CHEMICAL**
Chemical Analyst
Chemical Engineering
Chemical Lab Technician
General Chemistry
Plastics Technician

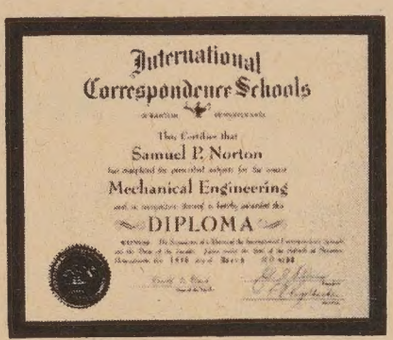
**CIVIL ENGINEERING**
Civil Engineering
Highway Engineering Tech.
Sewer Plant Operator
Surveying & Mapping
Water-Works Operator




**COLLEGE COURSES**
American History
Calculus
Economics

**COMPUTERS**
COBOL Programming
Fortran Programming
Programming for Digital Computers
Programming the 360
Programming the 1401

**DRAFTING**
Aircraft Drafting
Architectural Drafting
Blueprint Reading
Design Drafting
Drafting Technology
Electrical and Electronic
Mechanical
Structural


International Correspondence Schools
This Certifies that
Samuel P. Norton
Mechanical Engineering
DIPLOMA

**ELECTRICAL**
Electrical Engineering
Appliance Servicing
Elec. Engineering Technician
Industrial Electrician
Motor Repairman
Practical Electrician
Practical Lineman

**ENGINEERING (Refresher Courses for Graduate Engineers)**
Chemical
Civil
Electrical
Industrial
Mechanical
Sanitary
Structural

**HIGH SCHOOL**
High School Business
High School General
High School Math.
High School Secretarial
High School Vocational
College Preparatory
Preparatory Course for H.S. Equivalency Test

**MACHINE SHOP PRACTICE**
Machine Shop Practice
Maintenance Mechanic
Reading Shop Prints
Tool & Die Maker
Welding, Gas & Electric

**MECHANICAL**
Mechanical Engineering
Aircraft Mechanic
Hydraulic, Pneumatic Power
Industrial Engineering
Industrial Instrumentation
Machine Design
Power Plant Engineering
Quality Control
Refrigeration, Air Conditioning
Tool Design

**SECRETARIAL**
Clerk-Typist
Secretary, Legal
Secretary, Medical
Secretary, Professional
Shorthand
Stenographic
Typist

**WHY ICS?**
- **Widest choice of specialized courses (266)**
- **Most experience—8,000,000 students**
- **Individual instruction, personal service**
- **Courses tailored to fit special needs**
- **Easy pay-as-you-learn plan**
- **Accredited member, Nat'l Home Study Council**
- **1 in every 14 top executives a former student**
- **Special rates to members of U. S. Armed Forces**

**TV-RADIO-ELECTRONICS**
Electronics Fundamentals
Electronic Technician
General Electronics
Industrial Electronics Tech.
Radio Telephone License
Telephony
TV and Radio Servicing

**WRITING and ENGLISH**
English and Writing
Free-Lance Writing
Reading Improvement
Other (tell us)

ICS® International Correspondence Schools
Division of Intext

**MAIL TO ICS, SCRANTON, PA. 18515** N0949F
(In Hawaii, P.O. Box 418, Honolulu. Canadian residents mail to Scranton address—further service handled by ICS Canadian Ltd.)

I'm interested in a program of independent study. Send me examples of ICS lesson material together with your catalog for:

_____
(Print course subject. See list or indicate other subject of interest.)

Miss Mrs. Mr._____ Age____

Address_____

City_____ State_____ Zip_____

Occupation_____ Employed by_____ Working Hours____AM to____PM

**"Serving the Need to Know"—In the home and industry**

# RAILROAD MAGAZIN

*Adventurous Railroading and Rail Hobbies—Founded 1906*

VOL. 87, No. 4 AUGUST, 1970 50 CENT



*FREEMAN HUBBARD*
Editor

*ALBERT HERSKOVITS*
Associate Editor

*MICHAEL A. EAGLESON*
Steam Locomotives

*SY REICH*
Technical Editor

*BARBARA KREIMER*
Information Booth

*STEVE MAGUIRE*
Transit Topics

*JAMES EDMONDSTON*
Diesel Locomotives

*JOSEPH EASLEY*
Illustrator


## ILLUSTRATED FEATURES


Photographs of the Month ..... 1
Brooks Locomotive Works ..... Leslie F. Chard 1
Interesting Railfans No. 92: Virgil C. Staff ..... 2
First-Generation Diesels ..... Bert Pennypacker 2
Roster of the Southern Pacific ..... Sy Reich 3


## FICTION


Tony's Tin God ..... Gilbert Lathrop 4

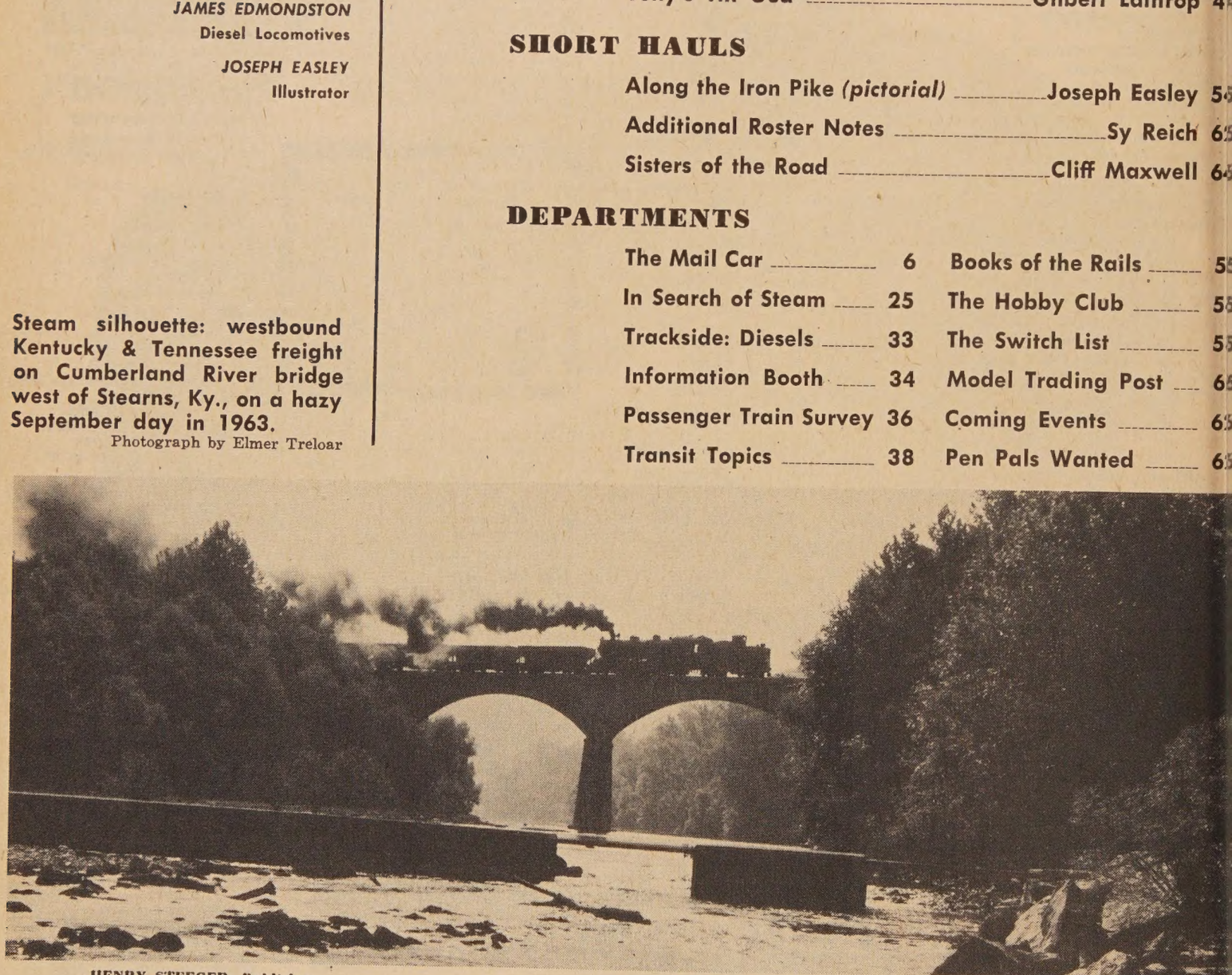

## SHORT HAULS


Along the Iron Pike *(pictorial)* ..... Joseph Easley 5
Additional Roster Notes ..... Sy Reich 6
Sisters of the Road ..... Cliff Maxwell 6


## DEPARTMENTS


The Mail Car ..... 6
In Search of Steam ..... 25
Trackside: Diesels ..... 33
Information Booth ..... 34
Passenger Train Survey 36
Transit Topics ..... 38
Books of the Rails ..... 5
The Hobby Club ..... 5
The Switch List ..... 5
Model Trading Post ..... 6
Coming Events ..... 6
Pen Pals Wanted ..... 6


**Steam silhouette: westbound Kentucky & Tennessee freight on Cumberland River bridge west of Stearns, Ky., on a hazy September day in 1963.**
Photograph by Elmer Treloar




HENRY STEEGER, *Publisher*
ROBERT D. MORIARTY, *Advertising Director*
EARL UMPENHOUR, *Production Manager*
IRA MOSHIER, *Newsstand Sales Manager*
JOSEPH MUCCIGROSSO, *Subscription Manager*

ADV. REPRESENTATIVES
Robert Stark Associates, 145 East 52nd St., New York, N.Y.
Harley L. Ward, Inc., 360 North Michigan Ave., Chicago, Ill.
Townsend Millsap & Co., 110 Sutter St., San Francisco, Calif.
Townsend Millsap & Co., 3959 West 6th St., Los Angeles 5, Calif.

RAILROAD MAGAZINE is published monthly by Popular Publications, Inc. at 205 E. 42nd Street, New York, N.Y. 10017. Henry Steeger, President. John J. McVarish, Treasurer. Second-class postage paid at New York, N.Y., and at additional mailing offices. Magazine is copyright © 1970 by Popular Publications, Inc. Copyright under Universal, International and Pan-American Copyright Conventions. All rights reserved, including the right of reproduction, in whole or in part, in any form. Single copy 50c. Subscription for U.S.A. and its possessions, $5.00 for one year; $6.00 per year in Canada and all other countries. Title registered in the U.S. Patent Office. Send all subscriptions and renewals to Railroad Magazine, Portland Place, Boulder, Colo. 80302. Address other mail to Railroad Magazine, 205 E. 42nd St., New York, N.Y. 10017. Please query the editor before submitting feature articles. Care will be exercised in the handling of unsolicited manuscripts, but no responsibility is assumed for their return. Printed in U.S.A.

CHANGE OF ADDRESS: POSTMASTER—Please mail Form 3579 notices to: RAILROAD, Portland Place, Boulder, Colorado 80302

# How to Speak and Write Like a College Graduate

*"It's easy," says Don Bolander...*

*"and you don't have to go back to school!"*

"Do you avoid the use of certain words even though you know erfectly well what they mean? Have you er been embarrassed in front of friends the people you work with, because you onounced a word incorrectly? Are you metimes unsure of yourself in a conver- tion with new acquaintances? Do you ave difficulty writing a good letter or utting your true thoughts down on paper?

"If so, then you're a victim of *crippled nglish,*" says Don Bolander, Director of areer Institute. "Crippled English is a andicap suffered by countless numbers of ntelligent, adult men and women. Quite ften they are held back in their jobs and heir social lives because of their English. nd yet, for one reason or another, it is mpossible for these people to go back o school."

Is there any way, without going back to chool, to overcome this handicap? Don Bolander says, "Yes!" With degrees from he University of Chicago and Northwest- rn University, Bolander is an authority n adult education. For almost twenty ears he has helped thousands of men and vomen stop making mistakes in English, ncrease their vocabularies, improve their vriting, and become interesting conversa- ionalists *right in their own homes.*

### BOLANDER TELLS HOW IT CAN BE DONE

During a recent interview, Bolander said, "You don't have to go back to school in order to speak and write like a college graduate. You can gain the ability quickly and easily in the privacy of your own home through the Career Institute Method." In his answers to the following questions, Bolander tells how it can be done.

**Question** *What is so important about my ability to speak and write?*

**Answer** People judge you by the way you speak and write. Poor English weakens your self-confidence — handicaps you in your dealings with other people. Good English is absolutely necessary for getting ahead in business and social life. You can't express your ideas fully or reveal your true personality without a sure command of good English.

**Question** *What does a "command of good English" mean?*

**Answer** A command of good English means you can express yourself clearly and easily without fear of embarrassment or making mistakes. It means you can write well, carry on a good conversation—also read rapidly and remember what you read. Good English can help you throw off self-doubts that may be holding you back.

**Question** *But wouldn't I have to go back to school to gain a command of good English?*

**Answer** No, not any more. You can gain the ability to speak and write like a college graduate right in your own home — in only a few minutes each day.

**Question** *Is this something new?*

**Answer** Career Institute of Chicago has been helping people for many years. The Career Institute Method quickly shows you how to stop making embarrassing mistakes, enlarge your vocabulary, develop your writing ability, discover the "secrets" of interesting conversation.

**Question** *Does it really work?*

**Answer** Yes, beyond question. In my files there are thousands of letters, case histories and testimonials from people who have used the Career Institute Method to achieve amazing success in their business and personal lives.

**Question** *Who are some of these people?*

**Answer** Almost anyone you can think of. The Career Institute Method is used by men and women of all ages. Some have attended college, others high school, and others only grade school. The method is used by business men and women, typists and secretaries, teachers, industrial workers, clerks, ministers and public speakers, housewives, sales people, accountants, foremen, writers, foreign-born citizens, government and military personnel, retired people, and many others.

**Question** *How long will it take me to gain the ability to speak and write like a college graduate, using the Career Institute Method?*

**Answer** In some cases people take only a few weeks to gain a command of good English. Others take longer. It is up to you to set your own pace. In as little time as 15 minutes a day, you will see quick results.

**Question** *How can I find out more about the Career Institute Method?*

**Answer** I will gladly mail you a free 32-page booklet.

### MAIL COUPON FOR FREE BOOKLET

*To receive a free copy of the 32-page booklet,* How to Gain a Command of Good English, *just mail the coupon below. The booklet explains how the Career Institute Method works and how you can gain the ability to speak and write like a college graduate quickly and enjoyably at home. Send coupon, card, or letter today to Don Bolander Career Institute, Dept. 213, Mundelein, Illinois 60060.*

**DON BOLANDER,** Career Institute, Dept. 213 Mundelein, Illinois 60060

Please mail to me, without obligation, a free copy of your 32-page booklet, How To Gain A Command Of Good English

Name_____

Street_____

City_____ State_____ Zip Code_____

☐ If 18 or under, check here for special booklet

Also send a copy to my friend who is interested.

Name_____ Age_____

Street_____

City_____ State_____ Zip Code_____

May we use your name in writing your friend? ☐ Yes ☐ No

# THE MAIL CAR

## where editors and readers meet

PICTURED on our cover is the New York Central's 2702, in 1947, with a westbound freight approaching the mainline station of Chili (no longer extant), about 15 miles west of Rochester, N.Y. No. 2702 was a Mohawk (4-8-2), class L2A (Alco, 1925). The maker of this photo is Charles M. Knoll, 120 Coolidge Ave., Spencerport, N.Y. 14559. He has a railroadiana collection that includes some Mexican steam hardware; also semaphore arms and blades, telegraph instruments, station signs, depot furniture, etc., plus a well-equipped 0 gage layout with about 130 feet of mainline route, representing part of the Central in the 1940's. ●

Charles M. Knoll

**New Haven brakeman on track west of New London, Conn., is the subject of thi etching by Yngve Edward Soderberg, 229 Clift St., Mystic, Conn. 06355, wh is selling these original signed etchings, over twice this size at $32 each, postpaid**

THE FABULOUS 103. Today they refer to her as "the diesel that did it," writes Bert Pennypacker as a sidelight on his current feature (page 26) "but in November, 1939, when FT demonstrator No. 103 rolled from the Electro-Motive plant at LaGrange, Ill., the whole idea of a mainline freight diesel was little more than an unproven theory in the head of its designer, Richard M. Dilworth.

"The four-unit, 5400-hp loco had been built practically in secret, with no press releases, photos or fanfare. Never before had a demonstrator taken to the road so bluntly. But never before had there existed a power plant on wheels like the 103. EMD rightly felt that caution was wise when pitting its radical new concept against the experience behind a century of steam engineering skill.

"So Dilworth the designer became Dilworth the salesman. He took the 103 on a notable 11-month safari through 35 states over 20 railroads, piling up 83,764 miles and getting orders for duplicates from most of the trial users.

"The amazing dark green and yellow-striped machine topped tonnage and time ratings of steam power wherever it went. It conquered America's toughest mountain grades with ease—the Berkshires, the Rat Hole, Salida, Tehachapi, Feather River Canyon, Paradise, Cranberry. Even steam behemoths like Espee cab-forwards, Northern Pacific Yellowstones, and Baltimore & Ohio EL5's proved no match for the 103, which simply eclipsed the best that Bruce, Vauclain, and Woodard had been able to offer in super-power steam.

"As just one example, Northern Pacific requested a test in passenger service hauling the east and westbound *North Coast Limited* between Livingston and Missoula, Mont., 240 miles over grades up to 2.2 percent. The 17-car trains would normally have required a 4-6-6-4 and two helpers. Dilworth's 103 handled both without helpers and did it in less than scheduled time.

"The triumphant 103 came back to LaGrange and sired 1090 offspring, Santa Fe getting the first production-line order. Southern Railway eventually bought the famous 103 and numbered its A-B-B-A hookup 6100-6150-6151-6104. It has long gone, except for A-unit 6100 which the Southern donated to the National Museum of Transport in St. Louis." ●

PERSONALITIES. Charles Laying one of our leading fiction writers of long ago, died the other day in Orlando, Fla., at age 75. His best-known story was "Riders of the Iron Trail." For years he was western editor of *Railway Age*.

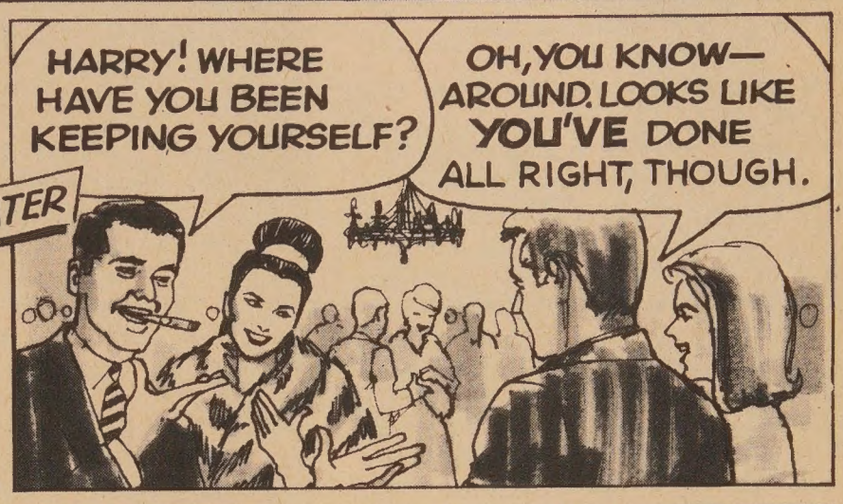
A schoolmate stole their coats and threw them into a chemical car on a freight train in Baltimore, Md. Climbing into the car to retrieve them, Lee Harris and Bob Adkins, both 8, were trapped inside: the door was closed,

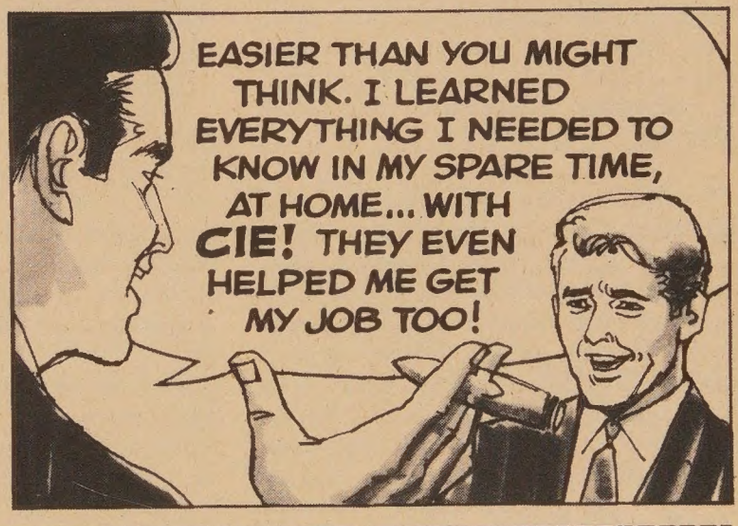
# THIS CAN BE YOUR "BIG BREAK"

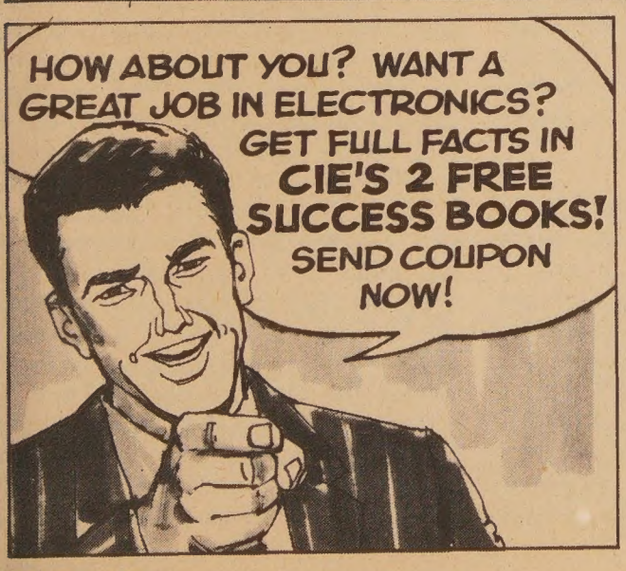
## if you're a man who doesn't want to be...

"Ashamed to go to his class reunion!"

REMEMBER, DEAR, OUR HIGH SCHOOL REUNION IS THIS WEEKEND.
DO WE HAVE TO GO, HONEY? SUPPOSE SOMEONE ASKS ME ABOUT THAT CRUMMY JOB OF MINE...?




EASIER THAN YOU MIGHT THINK. I LEARNED EVERYTHING I NEEDED TO KNOW IN MY SPARE TIME, AT HOME... WITH CIE! THEY EVEN HELPED ME GET MY JOB TOO!




**CIE** Cleveland Institute of Electronics
1776 E. 17th St., Cleveland, Ohio 44114

Please send me 2 FREE books describing opportunities in Electronics and how to prepare for them.

Name_____ Age_____
(please print)

Address_____

City, State, Zip_____

☐ **Veterans & Servicemen: check here for G.I. Bill information**

Accredited Member National Home Study Council

AM-17

and the train pulled out of town. Five days later, the train reached Syracuse, N.Y.; and the boys, hungry, thirsty, and exhuasted, were rescued and sent back home.

Besides being editor of *Trains* magazine, David P. Morgan writes the "American Quarterly" section of Britain's *Modern Railways;* so says *Smoke & Cinders* (Tennessee Valley RR. Museum, Box 44, Chattanooga, Tenn. 37401).

Johnny Cash, who highlights a "Ride This Train" sequence each week on his national TV show, was given a plaque by the Louisville & Nashville "in recognition of his fine and enthusiastic support of the country's railroads." A smaller version of the award went to his baby son, John. Presentation was made by Edison H. Thomas of the L&N public relations staff.

Many older workers don't know how to look for a job. A lot of free, easy-to-read help is available in a pamphlet *Do's and Dont's for Mature Job Seekers,* published by the U.S. Department of Labor. It's available in state employment services throughout the country. (Item printed as a public service.)

"In my 35 years as an engineer I had some of the best runs on the NC &StL and some of the worst," recalls D. E. Moore, 111 Stonewall, Memphis, Tenn. He began railroading in 1907, at age 18, by operating a pump for a water tank; later became a fireman, then a hogger and a traveling engineer. He welcomes letters and visits from oldtimers.

Trackside grave two miles north of Hiawatha, Kan., on the old St. Joseph & Grand Island (now Union Pacific) is that of a Mexican laborer killed when the road was being built. For many years Mexican gandy dancers kept it weeded and the marker white. The Great Northern has graves of Chinese who died in construction days near Noxon and Great Falls, Mont. And on the NP's Rocky Mountains Division are trackside burial sites of gunmen executed by vigilantes in the winter of 1882-'83.

Penn Central passengers get confused when Robert Franz and Henry Franz are their conductors. They're identical twins.

"I start at one end of the train," says Robert, "and my brother starts at the other end. When we meet in the middle, eyes blink. Sometimes I announce the next station from one end of the car and then step out and close the door—and then my brother appears at the other end, announcing the same station. That can really jar a passenger. It looks as if one of us just flew over the roof to the other side."

Succeeding Charles E. Fisher as editor of the highly-respected *Bulletin* of the Railway & Locomotive Historical Society is John H. White, Jr., chairman, Dept. of Industries, Smithsonian Institution, who will appear next month in our series of *Interesting Railfans.* Charlie retains his post as perpetual president of the Society. ●

A MATTER OF OPINION. "No magazine editor has ever won a popularity contest. Regardless of what you print or don't print, some readers resent it. No matter how tactfully you reject an amateurish script, the author will probably be sore at you. Furthermore, you can't convince photo contributors that your space is sharply limited. Is is impossible to make them believe the truth, namely, that every month your mail is flooded by hundreds of good pix and hundreds of poor ones. Each man naturally wants to see his own pictures published. And so, for various reasons, a large body of readers feel they are being discriminated against. Two of those who dislike rail-girl pix went so far as to cancel their subscriptions to this magazine. But I don't worry. You can't please all the readers all the time."—Freeman Hubbard

"You really outdid yourselves with the July issue—beauty from cover to cover! Now if *Playboy* were to run a train issue!"—Donald G. Bodi, 70-16 149th St., Flushing, N.Y. 11367

"I approve your decision to use more pix of pretty girls, on cover and inside the magazine. Even zeal for locomotives can be overdone. Some readers are like the rugged Medieval knight who could scarcely take his eyes off his warhorse to look at a beautiful woman. And I am reminded of three schoolgirl passengers who sang recently in a British Rail train and were rebuked by the crew. Yet a newspaper editor says that if we all sang as we walked and worked, we'd be better off. London Transport trains, in particular, need brightening up. They often look like the abodes of the dead, with rows of people gloomily studying political or financial news."—Joseph Fox, Monomark BM/EXN 3, London, WC1, England.

The railroad industry is operating in a modern society under a code dating back to the Civil War, according to Charles E. Bertrand, president of the Reading Co. Six Federal or quasi-governmental agencies regulate, control, or discipline it, on top of which 47 out of 50 states impose added rules and regulations. He adds that a railroad must get Federal approval and follow time-consuming routines in order to change rates, drop a losing service, set pri to yield a profit matching that of co petitors, or merge with other lines, matter how advantageous the mer might be to the shippers.

NEWS ITEMS. The Providence Worcester seeks a divorce fr Penn Central, which now runs it un a lease, and has notified the ICC t it no longer wants to be in the system.

Norfolk & Western began in June build a 24-mile line, including sev bridges and a 1,700-foot tunnel, to ser Martin County, Ky., coal mines.

An unused railroad tunnel near P tenburg, N.J., leased from the Leh Valley by Richard Young of Bou Brook, N.J., is being used for growi mushrooms. The railroad abandoned t tunnel about 40 years ago when a n one was built some 150 feet away, reports Clinton T. Andrews.

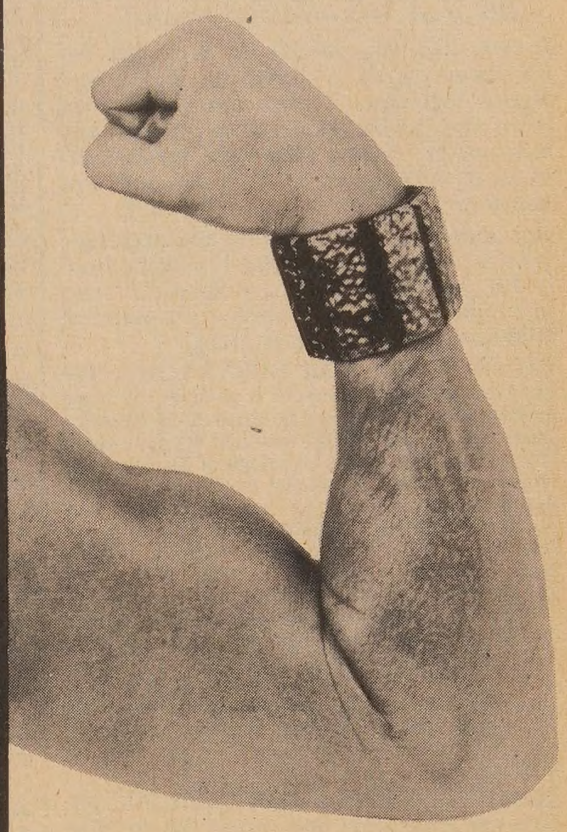
OVERSEAS. Guiseppe Lo Faro Messina, Italy, asked why he pull the emergency cord on a train, said did it for love. He had spotted a come blonde at the railroad station a thought she boarded the train. But s hadn't, so Lo Faro halted the train retrace his steps. He was given a hea fine, but said: "If only I had found th girl, it would have been worth it

A monorail Aerotrain, which und half-scale tests has achieved speeds u to 250 mph, is being developed Sweden by Salen Interdevelop AB Stockholm and a French firm, repor the Swedish Information Service, Ne York City. Aerotrains travel on a cushions along a concrete track con prising an upright and an inverted T.

Finding domestic air service unec nomical, Austria has discontinued it an now relies upon railroads and oth forms of ground transport for domest travel.

"I was happy to be given a subscrip tion to *Railroad Magazine* by a frien in the U.S. Railways have interest me ever since 1914. Here in Niger they have the oldtime fascination. De spite much dieselization, the steam loc is still putting on a good show. Kadun is a junction point; all Nigerian train pass through here. Port Harcourt lin has quite a bit of steam. Most loco here are British-built 2-8-2's. Half dozen Canadian lumber locos are s old that layers of black paint have obli terated the builders' plates. They bea such names as *Yukon, Montreal, Nov Scotia, Quebec,* etc. I have many photo taken in and around Kaduna; also abou 2000 colored railway postcards, no

# Build stronger arms the easy way with "lead-weighted" KARATE bracelets



Beautifully designed, ruggedly handsome, Lead 'N Leather Karate bracelets. Wear at work or play and quietly pack muscle on your arms. And they add real authority to your punch or karate hand strike.

Athletes have always used wrist weights to tone and develop muscles...but these were "strictly-business" gym-type affairs. Now they've been given a striking jewelry look... so you can wear them anywhere ...work, play, exercise or just relaxing...with pride! It's remarkable how your muscles respond . . . growing stronger, firmer! Lead weights have antique gold-tone; straps are genuine leather.

**$14.98 per pair.**

**2 pair $24.98** please add $1.00 for postage and handling

N.Y. City Residents Add 6%. N.Y. State Residents Add 3% Sales Tax

©1970

Delcron Products, Inc. Dept. GK-2
235 Park Avenue South, New York, N.Y. 10003

# Have You Got What It Takes to be a "World Builder?"

by Leonard Valore

*"Take 'er down a couple more inches, Joe. More ... more ... about a half inch. OK. Mark it! Didja get that, Pete? Four point seven. Fine! OK, guys, let's break for lunch."*

Sounds like fun, doesn't it? Well, life for the members of a Surveying Team isn't always that easy. There's sometimes mud, often dust, an occasional drop of sweat and now and then even a little light "spadework" to get the measurements from the exact spot you want them.

But Surveying *is* challenging and exciting—take it from one who earns his living from it. It's great to be part of a close-knit team of outdoor-loving men carefully measuring wilderness, city and water areas.

**BIG DEMAND FOR SURVEYORS.** The need for trained Surveyors is growing by leaps and bounds—as fast as the growth of America itself. Across our nation new highways, bridges, dams, waterways and buildings of all sizes and shapes are being developed everywhere. Thousands of slums are being cleared to make way for new "high rise" construction. New cities are born . . . and old ones re-developed. Utility lines, schools, shopping centers, parks and many other similar projects are needed for these new and changing cities. And, thousands of trained men are desperately needed *right now* to join Surveying Teams. In fact, thousands of new projects are actually waiting their turn for crews to Survey the raw land. More Surveyors *must* be trained and hired if America's expansion is to continue. The need is critical!

**HERE'S HOW YOU CAN QUALIFY.** Believe me, it's great to be a part of this booming field. And now *you* can train at home in your spare time for a top pay career as a member of a Surveying team . . . even if you have no previous experience or mechanical ability. North American Correspondence Schools' home study training (approved for Veterans and Servicemen and accredited by the National Home Study Council) has trained thousands of beginners for important outdoor positions of responsibility. You may already have the basic aptitudes to qualify for an exciting position as a member of a Surveying Team. Here's how you can find out all about it now . . .

**MAIL COUPON FOR FREE "SURVEYING CAREER KIT."** North American has prepared a "Surveying Career Kit." This Kit includes a 20-Page Booklet, "Your Future in Surveying," as well as an ingenious self-scoring Surveying Aptitude Test that will let you judge for yourself—in advance—how well you may be suited for a top pay Career in Surveying. There's no cost or obligation on your part — now or ever. Everything is sent to you FREE and POSTPAID and no salesman will call. Mail the coupon today for your FREE Career Kit. It could be that first important step that will lead you down the road to success and top pay as a member of a Surveying Team.

**NO. AMERICAN SCHOOL OF SURVEYING,** Dept. 04047
4500 Campus Drive, University Plaza
Newport, California 92660

**I am interested in learning more about how I can earn top pay as a member of a Surveying Team. Rush my "Surveying Career Kit" including Booklet and Aptitude Quiz. I understand there is no obligation on my part, now or ever, and that no salesman will call. Rush everything FREE and POSTPAID.**

NAME _____ AGE _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____


photos, dating back to 1880."—Eric A. Lomax, c/o Kaduna Textiles Ltd., P.O. Box 68, Kaduna, Nigeria. ●

BERT PENNYPACKERS feature on steam and *Metroliner* speeds (May issue) evoked these comments from Raymond J. Harrod, 5611 W. Lake St., Chicago, Ill. 60644: "Little or no improvement in railroad car or track design has been made since the first lightweight cars came out in 1933. The *Metroliner's* rather obvious failures are inexcusable in view of what was done 35 years ago by practical railroad men and 60 years ago by electric traction people. Bert's article indicates that speeds up to 125 mph were commonplace on the Milwaukee Road and the competing steam power of the Chicago & North Western. The Milwaukee's *400's* achieved speeds of 105 to 109.

"The Japanese seem to be stuck at top speed of 125 mph, as were the Milwaukee's steam trains of 35 years ago. Japanese MU electric trains do have the advantage of much better acceleration and thus more overall speed with no increase in top speed."

Undoubtedly because of competition from Penn Central's *Metroliner,* the Eastern Air Lines recently dropped 3 of its 8 daily Newark-Washington flights. This recalls the fact that the modern highspeed New Tokaido Line trains have cut sharply into air service between Japan's two major cities.

Another comment on the same article comes from Bill Church, Missouri Pacific conductor, 1011 W. 52nd St., North Little Rock, Ark. 72118: "I recall an evening in 1949 when three U.S. Army officers, including myself, nearly became traffic statistics. We were stationed at Camp McCoy, Wisc., and we drove into Sparta, on the Milwaukee Road's mainline. A grade-crossing sign read: 'Warning—Trains pass in excess of 100 miles per hour.' Just clear of it stood a freight train, with crew on the ground, and the crossing lights were flashing. Lt. Kelso, the driver of our automobile, stopped there; we looked both ways and saw nothing coming. We thought the freight was standing on the crossing-lights circuit, so Kelso put the car in low gear and we moved over the track at slow speed.

"Just as our rear end cleared the unoccupied mainline, a gust of wind shook our automobile and the *Afternoon Hiawatha* roared by, doing over 100 per. The freight crew said it missed us by about three feet. If Lt. Kelso reads this letter, I hope he will write to me."

Bill Church was even luckier than he thinks. Just the other day, three boys dropping stones from a Penn Central trestle north of Wilmington, Del., were killed instantly when a Washington-bound *Metroliner* bore down on them at 100 mph. William V. Russell of Wilmington sent us this news. ●

HANGING around a Union Pacific depot was an unforgetta joy of my boyhood. I remember m of all the choice days when the *Ov land Limited* pulled in. In that stati telegraphers copied and reported ne of important events from the chatt ing brass instruments.

The general store in our town stc right across the tracks from the dep How well I recall the night of the fa ion show! It centered around Mrs. I Bailey, an ambitious woman. She the idea that such a show could ra money for the new hospital over Coon Corners, with the help of thr pretty nurses who happened to be town at the time. One nurse was pa Eskimo; she had won a Miss Alas title in a beauty contest. The other tv were a shapely figure-skater from Id land and a New York girl who h been a fashion model.

Anyhow, the show was to be held the upper floor of the general store a would cost each lady who attended o dollar. About 8 p.m. it got under wa At that time, I was putting in my fi week as a Union Pacific night operat I suggested to Bill Bailey that any m who wanted to see the show could so by paying three dollars a head f standing on the depot roof, and B quickly grabbed onto the idea.

Well, Bill sold more tickets than h wife did. I crawled up the train-ord signal pole to the roof, from whic vantage point I could see what w happening on both sides of the cu tain. I saw the girls strip themselv practically naked to change their dres es for the fashion show. The male cu tomers saw it, too.

Then hell broke loose. The wome discovered that the men and boys we spying on them.

As a result, I was fired from m telegraph job, but soon got another on on the Western Pacific. I worke in numerous Western depots since the Many a crowd I saw hanging aroun the depot, watching me pound brass There were kids, hoboes, lumberjacks "fancy women," sheep men, cowpunch ers, prospectors and miners, hunter and trappers. Traveling salesmen ofte used the depot platform or waitin room to display their wares. Medicin shows, too, were put on in the waitin room of the station.

One day when I was employed a Sage, Wyo., a cowboy rode into tow with a pretty but sensuous-looking fe male behind him on the saddle. He de manded that I sell tickets for all three of them—man, girl, and horse—t New York City. The last I ever saw o the two riders was in a saloon across the street, raising hell. These are bu a few of the memory pictures that have always stayed with me.—George Jennings Gale, 2527 Buker St., Olympia, Wash. 98501. ●

NEW YORK DOCTOR DISCOVERS A DRAMATIC NEW BREAKTHROUGH TO CURE OVERWEIGHT.
0,000 PATIENTS LOSE POUNDS AND INCHES QUICKLY AND SAFELY WITH NEVER BEING HUNGRY.

# I lost 85 lbs. of ugly fat n only 2 short months!'

, THIS IS MY ASTOUNDING STORY OF HOW I LOST 85 POUNDS OF EXTRA WEIGHT IN ONLY 60 DAYS . . . NO DIETS . . . NO CALORIE COUNTING . . . NEVER HUNGRY AND COMPLETELY SAFE.

he summer of 1967 I noticed a report written by a New York Doctor who was specializing in Internal dicine. The doctor wrote that he had helped 10,000 overweight men and women to lose all the weight y desired. These people included Doctors, Nurses, Dieticians, Life Insurance Experts, Actors, Models, others who had Never Been Able to Reduce Successfully No Matter How Hard They Tried. Yes, these ple were permitted as many meals as they wanted — No calories to count. They ate as much or more n ever . . . Were never hungry AND TO EVERYONE'S AMAZEMENT SAW POUNDS MELT AWAY WITH UN-IEVABLE SPEED IN THE FIRST 3 DAYS OF FOLLOWING THIS METHOD. Some people actually LOST 25 UNDS THE FIRST WEEK. After carefully examining the medical report, I decided to give this Doctor's thod a try.

TARTED TO FOLLOW THIS DOCTOR'S SENSATIONAL PLAN AND TO MY UTTER AMAZEMENT I LOST MORE IGHT IN THE FIRST 3 DAYS THAN IF I HARDLY EATEN ANYTHING AT ALL. After seeing such amazing ults in ONLY 3 DAYS I continued on — NEVER HUNGRY EVEN ONCE — to lose a total of 85 pounds in y 2 SHORT MONTHS. Never once did I suffer any ill effects from this quick and Dramatic Weight Loss. ad tried many times before to starve myself to lose weight but with this method — with no calories to unt and with the big weight loss the very first week gave me the confidence I needed to continue on. w I can Lose Weight as quickly as I desire and so can you. YES! The more I ate to satisfy my body the re weight I would lose. Now even though I love to eat I have no problem to keep my weight down to at it should be. I urge every overweight man or woman to start my method immediately for those tra pounds and inches are impairing your appearance, your health AND endangering and shortening ur life span. OBESITY IS THE NUMBER 1 HEALTH HAZARD IN AMERICA TODAY!! YES, THOSE EXTRA UNDS WILL KILL YOU . . . SLOWER FOR SOME . . . QUICKER FOR OTHERS.

### NOW! EAT UNTIL YOU ARE FULL AND LOSE POUND AFTER POUND!

e pounds actually melt away before your es with dramatic weight loss in only 3 days. ou'll feel healthier, look better and get back at vitality that you once had.

### I ATE AND ATE THOSE EXTRA POUNDS AWAY AND THE MORE FOOD I FELT I NEEDED O SATISFY ME, THE MORE WEIGHT I WOULD LOSE!

uld this be possible? Well, it certainly was for e and hundreds of thousands of other men d women like myself who starved and de-ived themselves of the food and nourishment ey needed. Now with this New Method it is ssible for you to maintain your proper weight thout depriving yourself of good healthful ling meals. AND BEST OF ALL DON'T OUNT CALORIES! I can't tell you what a essing this method was to me and what this me method I used can do for you.

### THIS AMAZING METHOD HAS NOW BEEN USED BY THOUSANDS OF PEOPLE LIKE YOURSELF ALL OVER THE UNITED STATES WITH 100% SUCCESS, SATISFACTION, AND WITH COMPLETE SAFETY

es, by following this simple method you can ctually lose as little or as much excess weight you desire. All you do is follow my simple rections.

I call my Method ANAPAX. Yes, The NAPAX Method was the end of my over-weight problem and the answer to Hundreds of Thousands of other people, male and female alike that really wanted to look years younger, live longer and get back that pep and energy they once had . . . and it can be yours too.

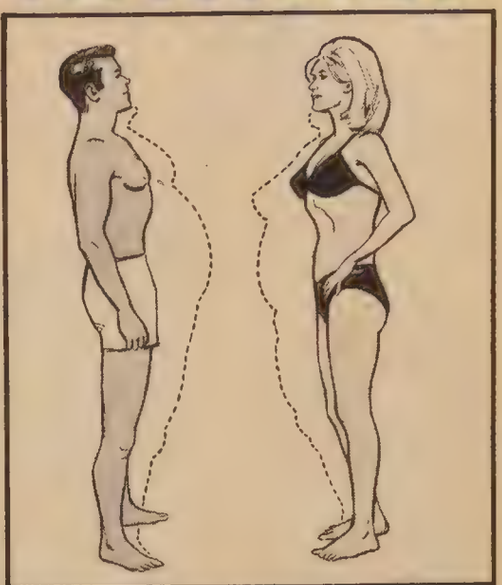
### THANKS TO THIS FAMOUS DOCTOR'S DISCOVERY THE BENEFIT OF LOSING WEIGHT AND KEEPING IT OFF PERMANENTLY WITHOUT REALLY TRYING CAN NOW BE YOURS

Here's how simple it is to actually do what I've been talking about this far . . . YES to END THAT FAT PROBLEM FOREVER!!

Simply follow the ANAPAX METHOD. All you have to do is to take 3 of my special tablets daily, one before each meal, follow the enclosed simple method . . . and that's all I ask you to do. ANAPAX Method will do the rest and Fast. Results guaranteed in only 3 days believe it or not. Trim down quickly and safely as I did to almost half the size I was. I felt and looked like a completely different person with perfect proportions. And not only did I feel years younger but people I hadn't seen for 2 or 3 months hardly could recognize me without my usual bloated appearance.

### DRAMATIC WEIGHT LOSS OF 25- 60- 90-POUNDS OR MORE CAN NOW BE ACCOMPLISHED IN JUST 60 DAYS OR LESS — WITH STARTLING RESULTS IN THE FIRST 3 DAYS OF USING MY FANTASTIC METHOD

The ANAPAX Method is not only the best weight reduction Method available to the public today but many of the foremost personalities in the theatre, show business, movies, etc. are losing pounds and inches with no effort at all for the first time in their lives.



HERE IS THE UNBELIEVABLE RATE AT WHICH THE POUNDS AND INCHES DISAPPEARED:

I LOST 35 POUNDS IN THE FIRST 2 WEEKS AND BY THE END OF THE 2ND MONTH (60 DAYS AFTER I HAD STARTED THE PLAN) I WAS 85 POUNDS LIGHTER. YES! I LOST 85 POUNDS IN ONLY 60 DAYS.

### WE ALL KNOW IF YOU STOP EATING COMPLETELY THAT YOU CAN LOSE WEIGHT. BUT YOU'LL MAKE YOURSELF SICK, UNCOMFORTABLE, AND ROB YOUR BODY OF ITS VITAL NEEDS . . .

But now . . . this is all in the past — losing all the weight you desire can be a simple, fast and safe experience for you by just following the ANAPAX METHOD.

### GUARANTEED RESULTS IN JUST 3 DAYS OR YOUR MONEY REFUNDED IN FULL

Take advantage of the ANAPAX Method today! The longer you wait the more you're damaging your health and well being. Take advantage of my 3 Day Trial Absolutely Free. Remember if you don't see the results immediately your money back. I'm not saying that the ANAPAX Method may work for you . . . I say the ANAPAX Method WILL work for you . . . or it costs you nothing. Try the ANAPAX METHOD at my risk today while the supply is still available.

**READ MY AMAZING NO-RISK GUARANTEE CAREFULLY:**

1. You MUST see pounds and inches start disappearing the 1st 3 days.
2. You MUST never feel hungry at all.
3. You MUST see faster results than you have ever witnessed before.
4. You MUST feel and look better the first week.
5. You MUST lose the amount of weight you desire — or return the unused portion for a complete refund.

**ANAPAX PRODUCTS**

**PLEASE FILL IN ENCLOSED INFORMATION BLANK AS TO HOW QUICKLY YOU DESIRE TO LOSE WEIGHT.**

_____ I would like to lose _____ pounds in 7 days.
_____ I would like to lose _____ pounds in 14 days.
_____ I would like to lose _____ pounds in 21 days.
_____ I would like to lose _____ pounds in 28 days.
_____ I would like to lose _____ pounds in 60 days.
_____ I would like to lose _____ pounds in 90 days.

**SHIPPED IN PLAIN WRAPPER!!**

**ANAPAX PRODUCTS,** Dept. 842
**P.O. Box 194, Ryder Station, Brooklyn, N. Y. 11234**

Enclosed is my payment in FULL for your wonderful ANAPAX Method. I understand that if I do not Lose pounds and inches after following your ANAPAX Method . . . I am entitled to a refund of the complete purchase price.

Enclosed is: ☐ Cash ☐ Check ☐ Money Order

- ☐ **30 DAY Supply of ANAPAX only $5.98**
- ☐ **60 DAY Supply of ANAPAX only $10.00 (Save $2.00)**
- ☐ **90 DAY Supply of ANAPAX only $15.00 (Save $3.00)**
- ☐ **120 DAY Supply of ANAPAX only $20.00 (Save $4.00)**

Name_____

Address_____

City_____ State_____ Zip Code_____

**SORRY . . . WE DO NOT SHIP C.O.D. ORDERS**

# *you* ARE IN DEMAND... AS AN ACCIDENT INVESTIGATOR

- ***NO SELLING***
- ***CAR FURNISHED***
- ***EXPENSES PAID***

You can earn **top money** in this **fast moving, action-packed field.** Accident Investigators are urgently needed to settle claims worth billions of dollars annually. The tremendous increase of auto accidents alone have doubled the need of qualified adjusters.

Insurance Adjusters Schools lets you train **at home** or **in the Service** in your spare time, followed by Resident Training at our facilities. Nationwide employment assistance. Write for FREE information.

## *Read What Only A Few of the Hundreds of Graduates Have Said About I.A.S. Training:*

**Edward D. Paige** was a former U.S. Army mechanic. Now he's employed as a staff adjuster in Virginia. "Your I.A.S. Home-Study Course is, in my opinion, the best that can be obtained. Also, the Resident Training I received gave me a good working knowledge and understanding of the claim adjusting business."

**Collas D. Smelser** writes, "After 28 years in the Air Force as Chief Warrant Officer, I find the work as an insurance adjuster very interesting. My training with your institution certainly provided me with all the basics I needed to fill the challenging position as a staff adjuster with a large company in Texas."

**VA APPROVED FOR VETERANS AND INSERVICE PERSONNEL UNDER NEW GI BILL**

In Canada: Write to same address as coupon.

**DON'T DELAY!**
**MAIL COUPON TODAY**

Accredited Member
N.H.S.C.

INSURANCE ADJUSTERS SCHOOLS, Dept. **AM**
1901 N.W. 7 Street, Miami, Florida 33125

Please Print

Name _____

Address _____

City _____ State _____ Zip _____

Age _____ Phone _____

common sight in the days of steam were these Canadian National locos in front of the roundhouse at Stratford, Ontario.
Elmer Treloar, 101 California St., Highland Park, Mich. 48223

# Photographs of the Month

Climbing one of the many hills in and around the city, San Francisco Muni car No. 1128 takes passengers on their way to the beach on the "L", or Taraval line. Photo was made above the Twin Peaks tunnel.
Virgil C. Staff, P.O. Box 268, Berkeley, Calif. 94701

▲ Westbound Canadiana Nation
al train No. 168 passes ove
bridge at St. Mary's, Ont., a
it heads for Palmerston in 195
Photograph by Elmer Trelo

◀ Terrie LaPlace, a stenographe
for the Union Railroad, point
out the 24-hour clock, now in
stalled in all offices of the Pitts
burgh-based road. The change
was made to facilitate reports be
ing fed into computers.
A. E. Meyers for URR News

w York, Susquehanna & Western RS-1, built in 45, pulls a long string of boxcars westbound t of Hackensack, N.J. Train is doing 5 mph.
Joseph B. Rumsey, Box 3, East Rutherford, N.J. 07073

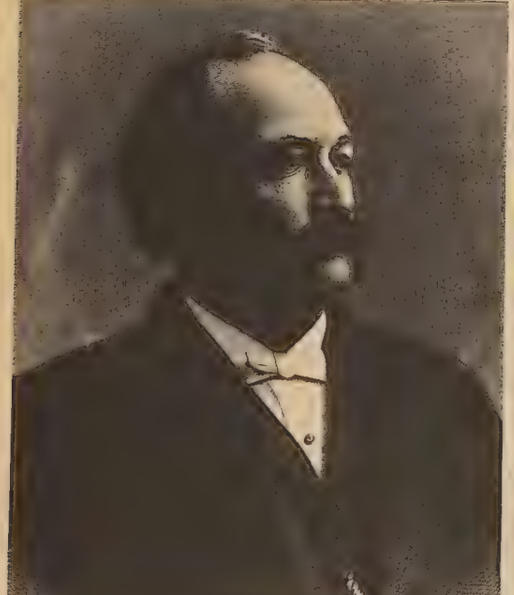
On this run of an Elgin, Joliet & Eastern-Rock Island passenger train, all switches were spiked into position and guards were on duty at all crossings. Reason for the precautions was that Mrs. Richard M. Nixon was on board. Two Rock Island diesels powered the special train, which included four RI and two EJ&E parlor cars. Train has just crossed Illinois River in photo.
R. J. Schiek, editor of J-Milepost magazine

West Side & Cherry Valley owns this attractive "C" class Shay which it operates on daily runs during the summer. Round trips are now six miles long (see June '70 Hobby Club).

**Powerful New York Central Mikados doublehead a long string of cars west of Ann Arbor, Mich., in the summer of 19**
Photograph by Elmer Trel

# BROOKS LOCOMOTIVE WORKS

## by Leslie F. Chard



Courtesy of Dunkirk (N.Y.) Free Library

BROOKS LOCOMOTIVE CO. of Dunkirk, N.Y., was founded and rose to success because a railroad management had made a serious mistake in its choice of terminals.

We will come to that soon. But first consider Horatio G. Brooks. Born in Portsmouth, N.H., on Oct. 30, 1828, he became an apprentice at age 16 in a machine shop owned by two cousins. Because his absorbing interest was locomotives, two years later he went to work in the Boston & Maine shops at Andover, Mass. In 1847 he became a fireman on the road and the next year, when barely 21, an engineer. He was tall and powerful and good-natured.

In some way he attracted the favorable attention of Charles Minot, general superintendent of the New York & Erie Railway. Mr. Minot needed a locomotive in Dunkirk to assist in building his railroad eastward. So he gave young Brooks a job as engine messenger. The engine selected was No. 90, the *Dunkirk*, built by the Hinckley & Dru Works in Boston, Mass.

Engineer Brooks delivered her No 28, 1850, after a tedious two-mon journey by boat to New York City a through the Erie Canal to Buffalo a then by the schooner *Commodo Chauncey* to Dunkirk. For the next fe months No. 90 hauled construction m terials. When the NY&E line was fo mally opened on May 13, 1851, wi Mr. Brooks at the throttle, she serve as pilot engine for the gaily decorate presidential special which was the fir train to make the 461-mile run fro Piermont to Dunkirk. Among the di tinguished guests on board were Millar Fillmore, President of the Unite States, and his cabinet, including Secr tary of State Daniel Webster. Local tr dition says that the latter arrived ampl fortified by a certain beverage fo which Kentucky is famous.

After completion of the NY&E, ou hero settled in Dunkirk, still workin

the Erie road, pulling passenger
ins for the next five years on the
estern Division. About this time trou-
developed. Charles Minot was a
uff man, but very democratic and
pular with the employes. The Erie's
rectors, who were stuffed shirts, dis-
proved of his free and easy associa-
n with the rank and file. Forced to
sign, he became manager of the
ichigan & Southern.

Daniel Craig McCallum, who took
er his job, was a competent railroad-
but a rigid disciplinarian. Like the di-
ctors, he did not believe that com-
ny officials should fraternize with
nployes. His first act was to make
rict operating rules, to be obeyed to
e letter—there was no appeal. The
en disliked him from the start.

Rule 6 of the new code required the
gineer to stop his train at all station
vitches and personally climb down
om the cab to see that they were
operly set. The big boss decreed also
at if and when a man was discharged
r cause, all other railroads would be
otified so as to make it very hard for
m to get another job. The engineers
otested at these unfair rules, but Mr.
cCallum ignored them. On June 17,
354, they struck. It was one of the
rliest strikes in railroad history.

The Erie could not endure a long labor war because its treasury was empty. Business soon came to a standstill. After ten days, Mr. McCallum surrendered. He agreed to a more liberal interpretation of rule 6 and disavowed any intention of posting dismissals with other companies. The engineers returned to work. But two years later resentment over rule 6 flared up again. That rule had caused the firing of 29 engineers in the two years of apparent peace, and the men were angry. Most of the experienced engineers left to work on other roads, including Mr. Brooks, who had been a leader in the strike and who became master mechanic on the Ohio & Mississippi Railroad.

Now the Erie was virtually paralyzed. After six months of sabotage, Mr. McCallum capitulated again. In 1859 the road went into receivership, due to the long and expensive strike plus the general depression of 1857. Mr. McCallum resigned. Charles Minot, reappointed general superintendent, prevailed upon Horatio Brooks to return to the Erie. Knowing that the man was too valuable to work in engine cabs, Mr. Minot made him master mechanic of the railroad.

In 1862 our hero became superintendent of the Western Division, and three years later, superintendent of motive power and machinery for the entire system. At that time Dunkirk's roundhouse had a capacity of 25 locomotives and a well-equipped machine shop, capable of actually building engines. Mr. Brooks had his men build a few.

The Civil War gave both Dunkirk and the Erie a shot in the arm. Trains carried troops, military supplies, and coal, while the port of Dunkirk was the busiest it had ever been. The future of the railroad and the village seemed assured.

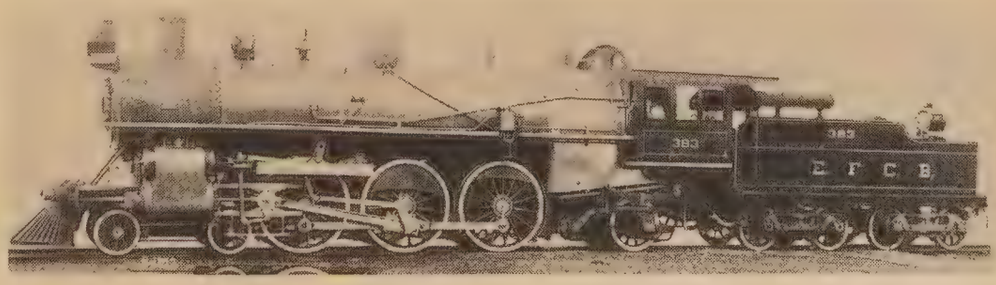
Then in 1868 the bottom fell out. The evil geniuses of the Erie, Daniel Drew and Jim Fisk, were battling with the wily Jay Gould for control. Mr. Gould won. Shortly after the railroad company had completed its line from Piermont to Dunkirk, it realized that it had made a mistake in the choice of terminals.

Its newer and more direct line from Jersey City to Buffalo was faster and more profitable. The railroad admitted then that Dunkirk's economic importance would never be as great as it had anticipated. Jay Gould, now in full control, was committed to a policy of rigid economy. Backed by his board of directors, he ordered that the car shops, with all their machinery, be transferred from Dunkirk to the more convenient location of Hornellsville. Consternation reigned in Dunkirk. With hundreds of men thrown out of work, coupled with the loss of valuable trade, this new move would mean an exodus of most of the population, making Dunkirk again just a sleepy fishing village.

Then Horatio Brooks came to the rescue. He loved this little community in which he and his family lived. The Erie shopmen were his friends and neighbors. He noted shrewdly that the shops had both the capacity and the machinery to build locomotives.

After the Erie directors had granted him a ten-year lease on the shops, he persuaded four friends and railroad colleagues to join him in the proposed new venture as trustees. On Nov. 11, 1869, meeting in New York City, they organized the Brooks Locomotive Co. with a capital stock of $350,000 (later increased to $500,000). Mr. Brooks himself was elected president and general superintendent and Marshall L. Hinman secretary-treasurer. Other trustees were William O. Chapin, M. R. Simons, and John H. Bacon, all of New York City.

An old photograph taken that year shows Mr. Brooks, Mr. Hinman, and a workman standing in front of the car shops, and 25 locomotives in the stalls. To the left you can see the paint shop and Gottfried Heine, an old German painter who dressed the new engines in




**In 1901, Brooks Locomotive Works became affiliated with Alco, but continued its production in full swing at the Dunkirk plant. This loco was built there in 1912 for E.F.C.B., the Central Railway of Brazil, and completed in 24 days. Builder's photo shows 68″ drivers and 21½x28″ cylinders; weight was 99 tons.**
From the author's collection

bright and colorful designs. His skill was popular in the days when crews took pride in the appearance and performance of their engines.

The entire plant then occupied nine acres. Its first locomotive order came from the Erie Railroad for 25 eight-wheelers of six-foot gage to be delivered at the rate of two a month. That December, one of them was built. The year 1870 saw 27 engines turned out. In 1872 the figure rose to 45, and in the following year, 73. The plant employed 379 men from 1869 through 1872—a large number when you realize that Dunkirk's entire population was only 6,900. In 1872 Mr. Brooks was unanimously elected village president.

Around that time, the *Buffalo Courier* printed a feature story headed "Superb Locomotive Engine—the *Jay Gould*—a Ramble through the Brooks Locomotive Works," which stated:

**In company with a few gentlemen of the city, a reporter of the *Courier* made a flying trip to Dunkirk yesterday for the express purpose of inspecting a new locomotive engine just completed at the Brooks Locomotive Works. *Jay Gould* is the name of the new locomotive engine. It was built for the New Jersey Southern Railroad and for the exclusive use of excursion trains between Sandy Hook and Long Branch. It is a standard Brooks engine, with cylinders 17x24, driving wheels 5 feet, and weighing something over 33 tons.**

**It is a rare combination of strength and is as graceful as it is strong. While there are no novelties introduced in its general construction, its mounting and ornamentation render it attractive beyond any locomotive we have seen. The cylinder casings, the dome casing, the bell and bell columns, the jacket bindings, and all the small brasswork inside the cab are nickel-plated, and the chaste and brilliant effect can be readily imagined. Where nickel-plating ceases, the highly-polished iron work begins, and when this effect is exhausted the matter of ornamentation is taken up by the painter. . . .**

**Standing before the pilot, one finds his attention engaged by a handsome "frontispiece," a bathing scene at Long Branch, which is highly animated and has a touch of the humorous about it. The pilot is done up in black, gold, and sky-blue; the engine wheels are painted black, gold, and red, and the sand-box which surmounts the engine is adorned with a heavy and elegant scrollwork, interspersed with miniature hunting scenes; the whole capped by a nickel-plated sphere.**

**The cab is of black walnut, wood color, and exteriorly ornamented with slender gold bands and a delicate vine. . . . On either side of the engine is a heavy iron scrollwork, highly polished, in the center of which, as in a frame, is set an excellent portrait of Mr. Jay Gould in gold, green, and conch-shell. . . .**

**The artist had a wider range for the display of his talents on the tender. . . . On top of each side of the tank are the words *New Jersey Southern*, painted in gold with a treble shading in varying tints of green. In the center of either side, on a ground of highly polished black, is the New Jersey State arms, and this surrounded by a massive and graceful scrollwork, which, while it takes a great variety of brilliant color, is elegant throughout. The truck supporting the tender is ornamented in black, gold, and light blue, and the wheels correspond with those of the engine.**

The reporter's evaluation of H. G. Brooks bears out what your author was told so many times thirty or forty years ago by men who worked with him:

**Mr. Brooks, who is the informing (sic) spirit of the establishment, is in the very prime of life. He has a splendid physique, a large active brain, and is just the man to swing a heavy enterprise for all it is worth. He is a master in his profession, and is fast gaining a national reputation as a builder of locomotive engines.**

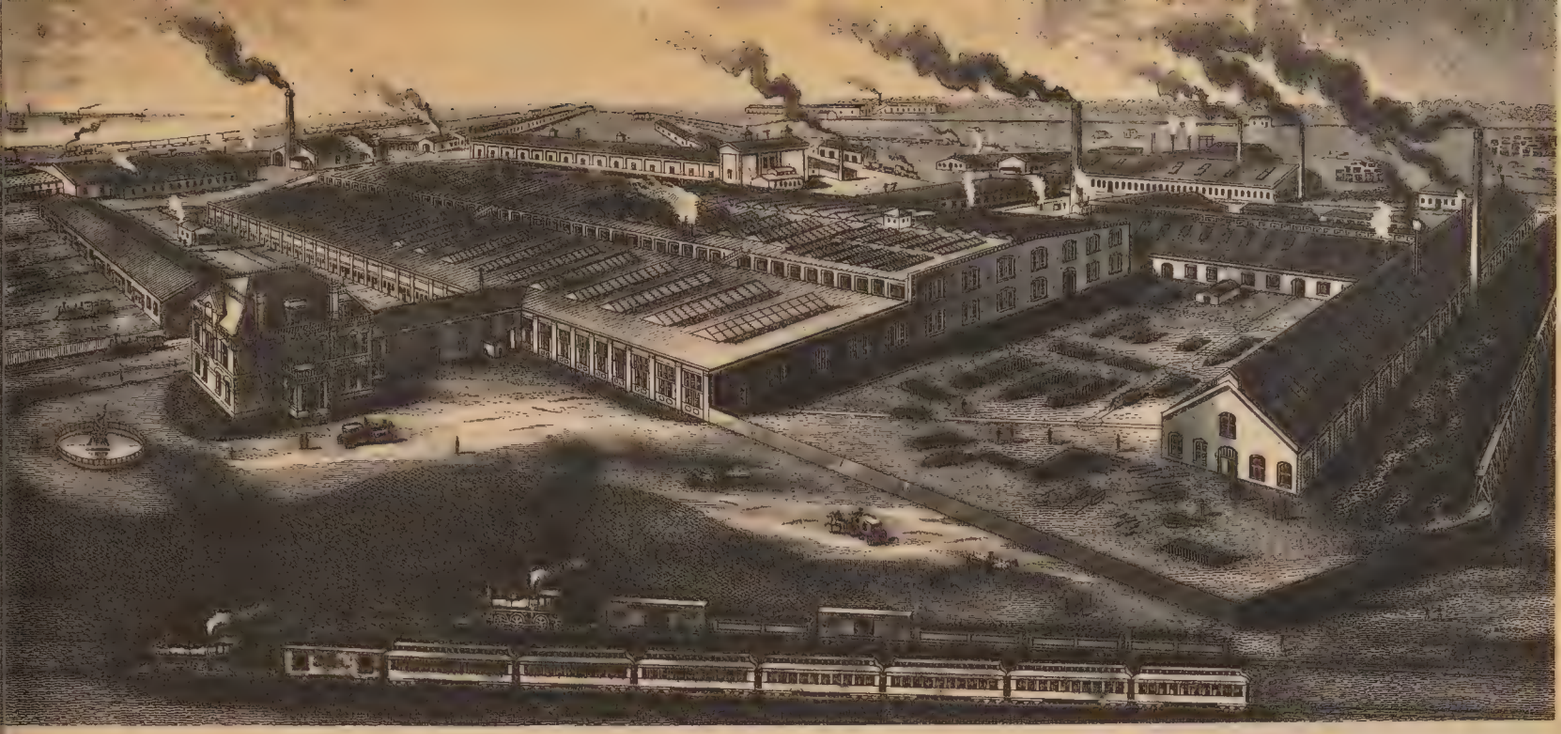
Then came the grim panic of 1873. The Brooks Locomotive Co., then barely four years old, suffered severely. By 1874 the working force of 375 had dwindled to 126. The six engines outshopped that year contrasted sadly with the 73 produced in 1872. But Mr. Brooks refused to be defeated. He kep as many men as possible on the payrol and when the company's treasury wa almost empty he used his personal re sources as well. For one thing, he gua anteed the grocery bills of the me whom his plant laid off.

But by the end of the decade, cond tions had improved materially; th Brooks plant built 100 locomotives i 1880. Production rose to 205 engines i 1882, and the work force increased ac cordingly. In 1883 the company wa financially strong enough to buy th property from the Erie Railroad. Ne buildings were erected; new propert was acquired, expanding the plant's are from nine to twenty acres.

In 1880, when Dunkirk was incor porated as a city, the peoples' choice fc their first mayor was Horatio G Brooks. It mattered not that the tow was strongly Democratic, and Mr Brooks himself strongly Republican. H established a school for apprentice where young fellows could learn to b good mechanics and study higher math ematics and drafting, thus fitting them selves for supervisory jobs.

Most locomotive builders in thos days had to contend with ineffectiv brakes. Among those working on thi problem was George Westinghouse, close friend of Mr. Brooks. The latte suggested that the solution might lay in the use of compressed air instead o mechanical power. Acting on this sug gestion, Mr. Westinghouse developec an effective air-brake, which the rail roads were quick to adopt. He then saic that inasmuch as Mr. Brooks had con ceived the idea, it was only fair that he should share in the profits, and the air brake man asked Mr. Brooks to handle his company's sales while he himself su pervised production. The locomotive builder replied: "George, you go aheac

**The *Jay Gould* was a good example of the beautiful craftsmanship of some early Brooks locomotives.**



**Old print gives a bird's-eye view of the busy Brooks plant as it appeared in 1888, the year after Mr. Brooks' death.**
From the author's collection

and get rich on your air-brakes. I'll stay with my locomotives."

Alas! He died of a cerebral hemorrhage on April 20, 1887, at the untimely age of 59, leaving a wife and two daughters. Nine years later, his family gave their mansion to the city of Dunkirk to be converted into a hospital in his memory. The Brooks Memorial Hospital, now housed in a larger, modern building, is still serving the city he loved.

Meanwhile, Edward H. Nichols, son-in-law of the deceased, succeeded him as president of the locomotive works; and when Mr. Nichols passed away in 1892, Marshall L. Hinman took over.

In September, 1898, Brooks Works completed its 3,000th engine, a huge monster built for the Great Northern. A mammoth celebration followed, the company being host to 2,000 people at a picnic. The local paper stated:

**Soon after eight o'clock . . . the ponderous Great Northern mastodon steamed out, hauling two flatcars, on which was the Lake City Band playing national airs, the other containing the Brooks gun squad. The locomotive was profusely decorated, flags being located wherever it was possible to place one. On one side was a streamer inscribed with the total weight of the engine and tender, 309,000 pounds, and the weight of the engine alone, 213,000 pounds. The tender was inscribed, "Brooks 3000" and "1869-1898," a portrait of the late H. G. Brooks being suspended above.**

The average weight of locomotives built in 1891 was 184,000 pounds; the average in 1899 was 270,000.

In June, 1901, Brooks Locomotive Works affiliated with the larger American Locomotive Co. of Schenectady. It also celebrated the building of its 4,000th locomotive. Its output for 1901 was 382 engines. The Brooks Works was the third largest employer west of the Hudson River, being exceeded only by Alco and General Electric. The total number of Brooks men employed as the year ended was 2,613.

But in that same year two threats to the industry appeared, although at the time people did not recognize them as such. On December 17th Orville Wright made the first successful flight in a mechanically propelled airplane at Kitty Hawk, N.C., flying 127 feet. The same afternoon his brother Wilbur flew 852 feet. And at Detroit, Henry Ford began building low-priced automobiles.

But for the next twenty years the Brooks Works prospered. Its engines were shipped to Brazil, Greece, India, Japan—to scores of out-of-the-way places. But the handwriting was on the wall. Highways were being built for automobiles. Local trains on railroad branch lines no longer paid and were gradually discontinued.

One by one the smaller plants owned by Alco were closed. The Brooks Works continued; but as the market for steam locomotives declined, business was diverted to the larger plant in Schenectady. Then in 1913 the diesel engine was invented, and the locomotive industry seized on the idea. Thus died most of the romance in railroading. Finally in 1927, the Brooks Works built its last engine. ●

**Typical Brooks 2-6-2 was built in 1906, probably for Northern Pacific.**

Louisville & Nashville Railroad

**Brooks-built No. 1882, a J4, was waiting at the station in Worthville, Ky., for local freight No. 86 before making its last journey on the L&N, Jan. 28, 1957 (see question 7, page 34).**

# Interesting Railfans No. 92

# VIRGIL C. STAFF

**by Freeman Hubbard**

**Rare sight. Denver & Rio Grande Western units 5754, 5703, 5753, 5743, and 5744, loaned to the Western Pacific, are eastbound through Pleasanton, California, on November 15, 1969. The third locomotive is class F-9B and the others are F7.**
Photograph by Virgil C. Staff, P.O. Box 268, Berkeley, Calif. 94701

HISTORY'S most famous "ladies' man," Casanova, was born on April second. So was railfan photographer Virgil C. Staff. But that doesn't explain why Virgil makes some of the cutest rail-girl pix we have ever seen. Astrology is bunk. Signs of the Zodiac have nothing to do with your personality or mine, and Virgil is no Casanova. Aside from the casual models used for his photographic hobby, the only lady he finds interesting is his wife LaVada, short and graceful, with a cheerful smile and a bright sense of humor. LaVada helps him to shoot railroad scenes in the rain—Virgil's favorite picture-shooting weather—by holding an umbrella over him while he clicks the camera. That in itself would make a good human-interest photo. I wish we had one to publish.

**Virgil C. Staff as he looks today.**

Woman-chasing Casanova was born in Italy in 1725. Virgil Staff burst into the world on a small Minnesota farm exactly 203 years later, his father being a laboratory technician, a masseur, and a pharmacist; but the lad grew up in Nevada, Iowa, on the Rock Island.

Between his home and the tracks lay cottonwood trees, a grassy meadow, and a cow. On one side rose a high wooden trestle. Virgil and his brother Elwood, being adventurous, liked to crawl on its under side near the upper bents and terminal mud-still and lie there, bellies down, quivering with fright while freight trains rumbled by, six feet above their little heads. At other times, from atop the trestle, they would set fire to tiny, home-made, model airplanes and toss them off into space like blazing comets. A guardian angel must have kept them from burning the trestle itself.

Three blocks from their modest frame house stood an old yellow railroad depot. In and around it the future Railfan 92 passed much of his boyhood, especially in summer when the one-room stucco schoolhouse he attended was closed. A local freight rattled through town every day with genial Pat Brown at the throttle of Consolidation

**Virgil's wife, LaVada; (left) helps native girl to do her wash near railway water tank in Huehuetoca, Mexico; (right) on Ramirez Rd., between Oroville and Marysville, Calif., at Western Pacific crossing.**
All photos on this page by Virgil C. Staff

No. 2008. The kid had a standing invitation from Pat to climb into the cab and cruise around the yards while the crew did switching. Those noisy, jerky rides filled Virgil with rapture.

"I probably drove Pat half crazy by asking so many questions about how steam worked," he says with a grin, "I was eight or ten, and quite a pest. Sometimes I'd sit alongside a locomotive and try to figure out her reciprocating connections. Then I'd go home and draw sketches of her. I kept a diary, too, of such important events as, 'I went down to the tracks today and saw the 2008.'"

One day, in defiance of a company rule, an engineer gave Virgil a cab ride on a 4-8-4 headed for Des Moines. At Shipley, two or three miles down the line, the semaphore arm signaled stop. As the train was pulling up to the station he saw a man, apparently an inspector, standing on the platform. Virgil was only about ten years old, but he didn't want to get the hogger in trouble, so he surreptitiously climbed down the cab's other side and walked home.

"I shall never forget," he tells me, "the day I saw two big 4-8-4 Alco 5,000's face each other. One of them had pulled into a siding with the rear of its train blocking the main; the other sat on the curve with her pumps panting like a living monster. There is a bit of a grade through Nevada town. I remember, like yesterday, the thunder and crashing I'd hear when a Northern type, northbound with tonnage, dug her feet in and tried to climb that grade. For a while it seemed those high-wheeling giants would never make it, but they always did."

Our hero also has a vivid recollection of heading for the tracks on numerous cold snowy nights to see a white-

**April 4, 1970: a Western Pacific special to Winnemucca, Nevada, and back rolls through Altamont, Calif., with ex-*California Zephyr* power. The train-watcher is Deborah Dunn, apparently taking a sun bath.**

**May 21, 1966: final day of steam on Feather River Railway. Three-truck Lima Shay, weighing 205 tons, wheels freight train up hill to Feather Falls, California.**
Photograph by Virgil C. Staff

**July 1, 1968: Virgil C. Staff poses beside engine 1036 at Teoloyucan, Mexico, on the very last day of regularly scheduled big steam operation in North America.**

shrouded passenger train drift through very late.

"There's an elemental quality about railroads," he tells us, "something wild and power-packed, like the sea. The beauty of a blustery night with snow blotting out the landscape enthralled me. Visibility was near zero, except for tiny worlds of pale yellow under the street and station lights. From out of the darkness an engine headlight suddenly pierced the snowy veil. A short stop. Then the ghostly train moved on, its coaches brightly lit. Inside, you could see well-dressed men and women cozy and at ease, ignoring the storm without. Where did those superior people come from? Why were they on the train? Such thoughts filled the wistful mind of this small boy as the caravan of dreams rolled off through the night in muffled silence."

While attending high school, he worked in the operating room of a large hospital, setting up the department of oxygen therapy there, and became deeply involved in resuscitation. Later, in 1945, he was employed at a sanitarium and hospital in National City, Calif. One day he waited at the elevator with an oxygen tank for a patient. As the elevator door opened, he almost ran into a girl pushing a large cart full of dirty bed-pans and other utensils. They both smiled and passed on. Later, when he entered the utility room to clean the oxygen equipment he found the same girl, elbow-deep in soap suds, scrubbing utensils. Thus he became acquainted with LaVada, who is now his wife.

Having graduated from Atlantic Union College with a degree in history and having done graduate work at the University of California, Virgil is now teaching at Balboa High School and engaged in research projects. His address is P.O. Box 268, Berkeley, Calif. 94701. Meanwhile, as a lad, he had been introduced to *Railroad Magazine* by rear-end crews on Rock Island freights. It excited him so much that he soon began buying copies himself.

"Even today," he tells us, "I look forward to every issue. Should *Railroad* fold in my time, something very important would go out of my life. Unlike some readers, I am not bothered by your pulp paper or ads, but I wish you'd give more attention to your proofreading."

The subject of this sketch does not collect railroadiana, but devotes considerable time to photographing engines and trains. Mostly, he goes out on his own, often with his wife or sometimes

ith a friend, such fellows as R. W. urner, Robert Hogan, John B. Hunrford, C. G. Heimerdinger, Jr., and arl R. Koenig.

"Sometimes LaVada and I go up into eather River Canyon for a couple ays," he says, "to photograph the Vestern Pacific. We love the San Fransco Bay area with all its vitality, its useums, cable cars, good music, and e entertainment, but at times it is fun get away from all that, maybe in the ltamont hills with the cows and meaowlarks. Typically, we will climb to a gh bluff overlooking the main and ait for a train. If we are on the WP, e probably know the crew. Frequently ey acknowledge us with a flick of the eadlight, a few toots, or the waving of white handkerchief.

"Our vacations are usually spent in e Southwest, driving our car along the P or the Santa Fe. We know where to nd old water tanks, pump-houses, and her props for railroad picture-taking. ne of my major regrets is the increasg difficulty of locating the kind of enery in which I like to photograph ains. Normally, I pick a spot I want see in my picture and then wait for train."

LaVada chimes in: "I am glad my usband is a train-chaser, because it kes us away from the routine of veryday living. I have seen him wait r hours just to get a certain train shot. lthough he is a busy man, he is never o busy to help me with the housework. He likes orderliness. His photos re carefully filed and his tapes corctly boxed. All films that he shows n screens are well edited. He feels that ny railroad man is a personal friend of is, and he is cautious around railroad roperty lest he cause someone undue orry. I am glad he lets me tag alone n his trips. My hubbie is my hobby, nd his hobby is trains."

In recent years, Virgil's quest for hotos led him back to some of the ame railroads again and again, especially to the Magma Arizona.

"In 1964, with four other fellows," e tells me, "I went to Canada, where ve caught about 15 steam engines in en days. In four different summers, LaVada and I visited Mexico to shoot he end of big steam there. July 1, 968, was the last regularly scheduled ig steam in North America. I remember returning to Mexico in the cab of he final work train pulled by steam. During my sojourn in that country, I ook thousands of feet of movie film—xposed trackside, from the cab, and rom tender tops.

**April 10, 1965: Sixty-ton electric locomotive No. 654 in Marysville, Calif., on the final day of electric operation on California Western Railroad, "Redwood Route."**

Both photographs on this page by Virgil C. Staff

**May 21, 1966: Shay No. 2 (shown at top of facing page) gets a few shots of oil at Feather Falls. The hogger treats his engine with loving care for last time.**

"My good friend, James Easton, who is somewhat of an audio expert, has spent much time with me in working out the basic problems in tape-recording trains. These tapes are something to listen to, now that steam is gone.

"In 1966 we were holed up by rain in Queretaro for three days. One evening we heard a Niagara coming into town. Boarding an old rattletrap taxi, we headed for the station. It was still pouring rain and we were not far from the depot when the taxi's engine died. We were in the middle of a swirling flood. Men were moving about in the water with shoes in their hands and trousers rolled up to their knees. The water began flowing through our taxi. We never did tape that Niagara."

Virgil first met Jim Easton when the latter was loudly playing some Norfolk & Western hi-fi's at home in Berkeley.

"I never could have heard a knock," Jim writes, "but chanced to glance at the open front door and saw a man, who turned out to be Virgil Staff, fuzzily outlined against the screen, making frantic gestures. I waved him in. Said he, 'I haven't heard a whistle cry like that since I was a kid. What are you playing?' I told him, showed him Winston Link's gorgeous album covers, and put on *Pigeon Creek Shifter*. We spent the next couple hours swapping railroad recollections.

"From that point on, the poor guy went batty. He soon had every railroad record available locally, with more on order. My measly little collection looked sick by comparison. Later, we took a trip to Santa Cruz, to see and smell steam again on a Shay operated by the now-famous narrow-gage Roaring Camp & Big Trees line. Our biggest thrill was an 80-mile excursion trip in 1963 on the Sierra Railroad behind No. 28, a full-size 2-8-0 (Baldwin, 1922) into the foothills of California's gold country."

Our hero is proud of the number of railroad photos he has made, both stills and movies. He has a few hundred steam negatives of eastern roads plus thousands of negatives, both steam and diesel, taken in recent years in the West. His railroad library includes steam and diesel technical manuals as well as thousands of items relating to the Magma Arizona.

Says R. W. Turner, an engineer on the WP: "Virgil has done more for the memory of steam than anyone else I know. Any day, you were likely to find him at some spot on the WP, sitting atop a tunnel mouth or high on a hill at a curve, with his camera. He can cover 300 miles of track in a day."

**Linda Sheppie puts the finishing touches on her toilette before boarding the Western Pacific train *California Zephyr* on April 13, 1969, at Fremont California.**
Photograph by Virgil C. Staff

"As I see Virgil," writes Valerie Doe, "he is a quiet, solid man who has found his place in life through experience, teaching, and deep thought, and is now confident and at peace with himself. He has a good sense of humor, even when the joke is on himself."

Bob Hogan recalls going out recently with Virgil and LaVada to photograph the final runs of the *California Zephyr;* "Virgil had set up his 16mm at 7:30 when I left him. Some 6½ hours later, after chasing the *Zephyr* down the canyon, I returned to find him still waiting for his shot just where I had seen him earlier. That was quite a wait, without even another passing train to take up some of his time!"

Our subject is of medium height and slightly overweight, about 190 pounds. Hazel eyes, graying hair. His eyebrows remind you of museum models of Neanderthal man. His main interests are LaVada, American history, railroad photography, the Magma Arizona, writing, and stamp collecting. He reads many books and journals.

"My cultural contribution to myself," he says, "is not having a television set."

Virgil's energy is tremendous. He keeps physically fit by taking long hikes, mostly on railroad rights-of-way, and by climbing hills in search of places to shoot pictures. In fact, he can outwalk and outclimb most of the high school students he sometimes takes with him. He also likes to work in the garden, but has a weakness for eating sweets.

Besides his professional affiliations, he belongs to the Pacific Locomotive Association, the Bay Area Electric Railroad Association, and the R&LHS. For two years as president of PLA he was largely responsible for moving one locomotive and acquiring two more, and he helped to organize and run steam and traction fantrips.

"When he gets interested in anything," muses Don Hansen, secretary of PLA, "he really goes all out on it and is satisfied with nothing short of perfection."

Tom Irion says: "Virgil Staff is a sensitive person, has a fantastic ability to communicate via the written word and is sentimental."

*Communicate* is right. The data he gave me for this article was uncommonly well written. Like many of us, Virgil regrets the passing of steam.

"I can never again ride the tenders of steamers in mainline service," he says, "nor hear another Niagara trying to get out of Huehuetoca with 100 or more ponderous cars of gravel. Some of the younger people today like to watch diesel-powered freights leave town on a grade. They will never experience the thrill of big steam."

# IN SEARCH OF STEAM

*with*
***Mike Eagleson***

MISSOURI PACIFIC at Longview, Texas, is keeping two Mikes, Nos 1125 and 1127, for use in flood seasons and these are regularly fired and moved around by the roundhouse crew, according to W. P. McCammon, Cleburne, Texas. I'd like to get further details from anyone who can verify this.

Sergeant Chemical Co. has a Vulcan saddletanker in its enginehouse just east of Kane, Pa., reports Russell W. Templeton, Warren, Pa. Not long ago, she appeared to be in good condition and was hauling chemicalized wood. Owners were then asking $20,000 for her.

Engines 2 and 7 of Lee-Tidewater Cypress Lumber Co. were seen recently on flatcars in Sunniland, Fla. For years they had been sitting at Copeland, Fla., stencilled "Property of Edaville RR.," with their sisters, Nos. 4 and 16, which are still there. "Who knows where they were shipped to?" asks Wm. T. Morgan, 1449 Linhart Ave., Fort Myers, Fla. 33901.

Again this year the Clinchfield is operating its ten-wheeler, America's oldest running steam loco, on fantrips. (See page 62) Who can confirm rumors about the Clinchfield acquiring a larger steamer or someone finding a Clinchfield Mikado in Kingsport, Tenn.?

Southern California Railroad Museum, a mile north of Perris, Calif., will soon be using its ex-Mojave Northern 0-6-0T No. 2 (Davenport, 1917) on passenger service with its caboose or a newly-acquired car.

Monticello & Sangamon Valley, a new operating steam road in Monticello, Ill., has much to do before it can operate a train over 4 miles of abandoned Illinois Terminal track. Motive power will be an ex-Southern Railway 2-8-0 and an 0-6-0, No. 191, ex-Republic Steel in Alabama. Details from Don Heimburger, 5400 N. Sheridan Rd., Chicago, Ill.

Cowichan Valley Forest Museum, in British Columbia, is dropping its live-steam operations and retiring its engines with longtime hogger Elmer Blackstaff. Usual power was ex-Hillcrest Lumber Co. two-truck Shay No. 1 and two Vulcan 0-4-0T's. Since Mr. Blackstaff has moved out of the Duncan, B.C., area, chances of a steam CVFM revival are very remote. Maybe some museum will buy the locos, probably still serviceable.

Swamp Rabbit Railroad, of Cleveland, S.C., has just sold its 1927 Vulcan 2-6-2 No. 110 to the Stone Mountain Scenic Railroad of Atlanta, Ga. The Prairie was seen a while ago in the SMSR shops getting an overhaul, along with 4-4-0 *Texas II*, reports Thomas A. Schiltgen, 3832 Blackstone, Markham, Ill. 60426.

"As a reader of *Railroad Magazine* for 36 years," writes H. A. Hill, 7609 S. 135th St., Seattle, Wash. 98178, "I challenge the truth of an item in your May '70 department which said Charles Morrow, Box 132, Sun Valley, Idaho 83353, had a rare standard-gage 115-ton 2-4-4-2 for sale. That 2-4-4-2 is only a disassembled pile of junk at Snoqualmie Valley Museum in Snoqualmie, Wash. Her badly rusted tender is ripped open. Her boiler stands upright, bare and likewise deeply rusted. Her cab looks as if a bulldozer ran over it. Her running gear is badly rusted and not more than 80 percent complete. Little is left of the boiler jacket and dome covers. Other parts are somewhat buried in dirt or puddles. This has been the case for over five years. Evidently Charlie does not give this junk any care nor permit anyone else to do so."

I have never seen the engine you refer to, Mr. Hill, so I cannot comment on your letter. Presumably the museum you mean is that of the Puget Sound Railway Historical Assn., which for 10 years has had a mile-long railorad on 10 acres at Kimball Creek near Snoqualmie Falls.

According to a recent *Seattle Times* news story, sent to us by Henry R. Korman, Longview, Wash., the museum site is owned by Puget Sound Power & Light Co. and leased to PSRHA for $50 a year. Lease will be terminated; the museum and its road must move before Aug. '72. The newspaper says PSRHA has 16 steam locos, 14 freight and passenger cars, special equipment cars, and 10 streetcars and interurban trolleys, plus track, ties, tools, etc. PSRHA is looking for a new site.

Colorado and New Mexico have reached "tentative agreement" with the Denver & Rio Grande Western to buy 65 miles of narrow-gage track between Antonito, Colo., and Chama, N.M. Negotiations for the two states, each provided with a $295,000 appropriation by its legislature, have agreed to pay $558,900 for track, rolling stock, etc.

Rolling stock included in the deal consists of five operable engines and four "junkers" for salvageable parts—all steam—plus 142 cars, including cabooses, a snowplow, and a pile-driver. Frank M. Freeman sent us this news.

Mobile & Gulf steamer No. 97 is still wheeling lumber. A photo of her doing so early this year, shown in April '70 issue of *The Sandhouse* (Mississippi Great Southern Chapter of NRHS), was made by David Price from highway 82 bridge just west of Buhl, Ala.

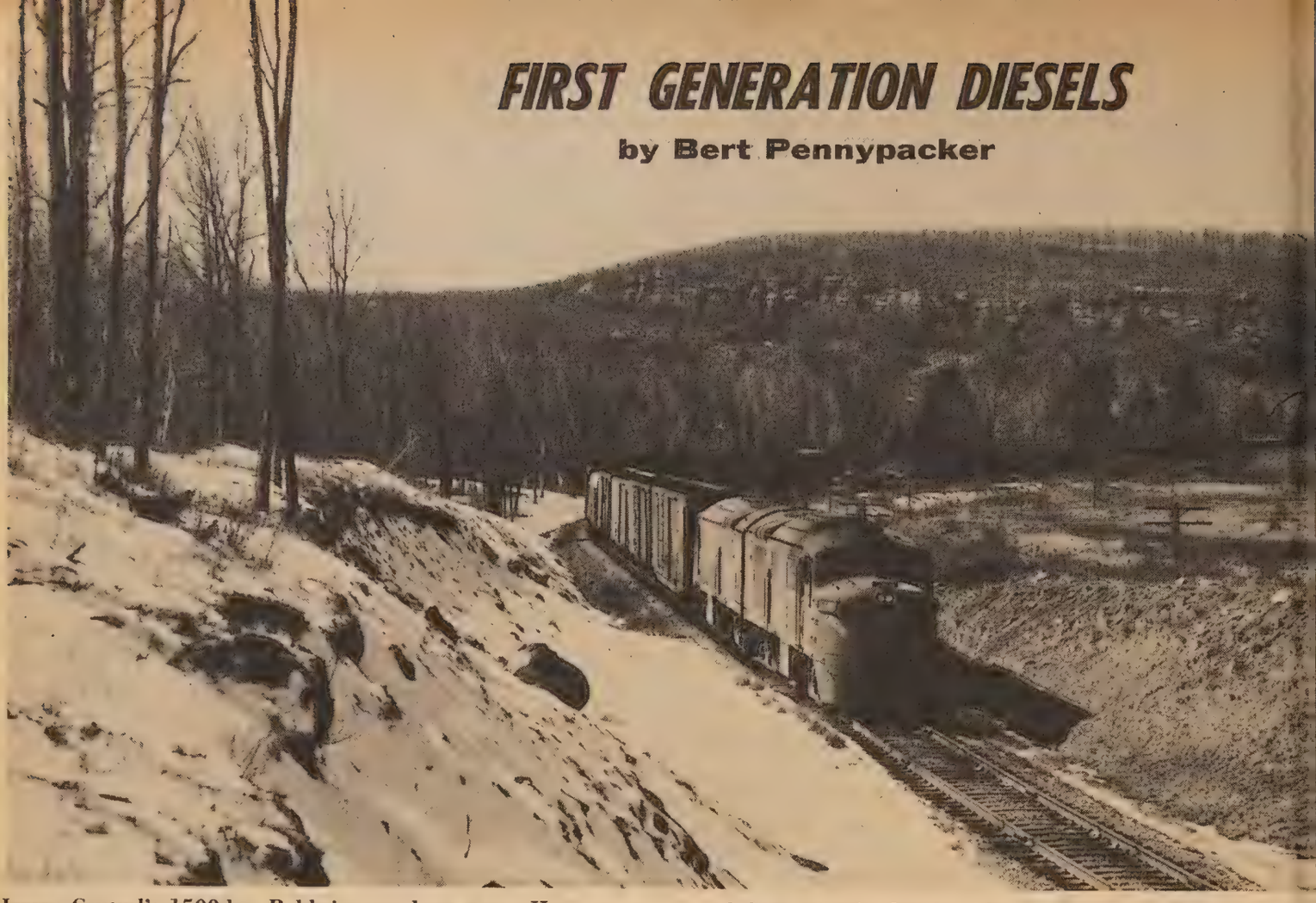
June 21, 1970, marked the driving of a "golden" spike for completion of a two-year construction project to relocate the steam line founded by the late Billy Jones. Now called the Billy Jones Wildcat Railroad, its address is Box 949, Los Gatos, Calif. 95030.

**Mike Eagleson does not work in our office. To save time, send steam mail directly to his home, 37 Edgemere Avenue, Mt. Arlington, N.J. 07856.**

**Formerly No. 2 of Venice (Calif.) Railway in 1906, this 2-6-2 live steamer has just been rebuilt and again is operating on the 18-inch-gage Billy Jones Wildcat RR.**

# FIRST GENERATION DIESELS

**by Bert Pennypacker**



**Jersey Central's 1500-hp. Baldwins are long gone. Here we see two of them round a bend in the mountains of Pennsylvania.**

Bert Pennypacker, 4307 Palmetto St., Philadelphia, Pa. 19124

ON A MEMORABLE day early in 1941, Santa Fe's shiny new diesel freight units 100, 100A, 101A and 101 awaited a departure signal in sprawling Argentine yards near Kansas City, their 16-cylinder engines idling with a deep, rumbling chant. This Electro-Motive FT hookup, packing 5400 horsepower within its brightly garbed blue and yellow car-bodies, seemed like a bold intruder in a world of hissing steam power. It was, in fact, the very first of its kind acquired by any railroad.

Although a sister demonstration FT had already proven its mettle, the die was cast and Santa Fe men now faced the acid test of their new machine. Could this sleek, 193-foot-long centipede, rolling on 32 wheels and weighing 456 tons, hold her own and make the required running time while pulling heavy tonnage?

The late Richard M. Dilworth, EMD's famed chief engineer and FT designer, had little doubt about his brain child's prowess. He consulted with a small army of technicians and ATSF officials aboard the locomotive, dynamometer car 29, a business car, and a Pullman.

Behind this assemblage of head-end equipment, the regular drag of 60 assorted freight cars, 3150 tons, trailed into a yard track. At last, mainline signals flicked from ruby red to emerald green, the conductor swung an arced highball from his hack, and the mighty 567-series engines sprang to life. The deafening roar mounted to a fever pitch. At length, when the generators loaded up to full capacity, No. 100 moved gracefully away.

It may have been a deliberate gesture or perhaps it was mere chance, but the dispatcher put the freight onto the mainline only 28 minutes ahead of the racing *Super Chief* streamliner. So the big question aboard No. 100 centered about the possibility of outrunning the *Chief* and reaching Emporia, 108 miles away, without taking siding. They pushed her to the limit of her ammeter readings and speeds up to 60 miles per hour were recorded as the porthole-windowed juggernaut churned along.

Suddenly, Dilworth appeared in the cab and said: "One of our engines is sick. We'll have to run with only three units until I can get it fixed."

Then he disappeared through the door to diagnose and treat his beloved machinery. Well, he got the ailment remedied, and the new FT thundered into Emporia just eight minutes ahead of the *Chief*, a highly successful run.

Richard M. Dilworth practically created the road diesel we know today. While most builders built a growing volume of diesel switchers in the 1930's, it took the design genius of Dilworth to produce the first successful high-speed streamliners using Charles F. Kettering's lightweight Winton 201A engines. But these, in Dilworth's estimation, were built for speed and advertising value, not for economy and reliability. Something better was needed—a heavy duty workhorse for freight, the backbone of railroading. The answer came in 1939 when the FT appeared at an opportune time.

Since EMD had the only successful diesel road freighter in production when World War II began, the War Production Board's ruling against new design development gave the plant at LaGrange, Ill., a clear board for exclusive FT work. They became coveted wartime babies, being allocated according to greatest need because of serious materials shortages in copper and electrical equipment.

A total of 1090 units went to 23 railroads, but nowhere did the FT perform more astoundingly than on the Santa Fe. With hundreds of miles of trackage across the desert of the great Southwest, water had to be hauled in

Richard M. Dilworth, famous EMD engineer.

**High in the rugged Sierra Nevadas, a Union Pacific passenger train overtakes Santa Fe freight at Summit, Calif. The SF "first-generation" units are 1350-hp. FT's, designed by Dilworth in 1939.**

Photograph by Bert Pennypacker

ank cars just to keep the steam power running. Santa Fe quickly became the biggest FT owner, with 320 units; the bottleneck was broken and wartime tonnage went through without delay.

Out around the huge Electro-Motive plant at LaGrange, memories of Dilworth are legend. Here is a true-to-life story of a boy with little more than a grammar-school education who became one of America's top engineers. Born in 1885 near Seattle, Wash., the son of a Presbyterian missionary, he left school and went to work at jobs like waterboy for a carnival and cook's helper on a sailing vessel. He later picked up the machinist trade, learned electrical engineering in the Navy, and gained more experience working for General Electric, finally coming to the Winton Engine Co. and Electro-Motive.

An inveterate pipe-smoker, Dilworth had a rare sense of humor, said what he thought, believed in simplicity, and hated the gaudy color schemes devised by the sales department for his diesels. He said, "A locomotive should be black." A frank admission of his biggest mistake involved designing the FT without standard couplers between cab and booster units, limiting its usage to either a 2700 or 5400 hp machine.

He called on Col. George H. Emerson, motive power chief of the Baltimore & Ohio, requesting that road to test one of his early passenger designs at no cost. Emerson expressed interest and a willingness to pay, but asked why the trial was offered for free.

"So you fellows won't tell us how to build it," replied Dilworth, who knew how railroads custom-designed so many things. He thought the only way to make a success out of a diesel would be to mass-produce it. A somewhat similar exchange of remarks occurred in the office of John Purcell, Santa Fe's super of motive power. At that time, railroads flinched at the idea of welding anything; parts had to be made from heavy steel castings.

"What kind of underframe does it have?" Purcell wanted to know.

"Oh," Dilworth said casually, "we welded together some needles and hairpins and stuff—made it strong enough to support the machinery!"

A self-educated engineer like Dilworth had his own unique working methods. Out at LaGrange, they still talk about the big roll of grocery-store wrapping paper, 36 inches wide, mounted under his desk. Using three slide-rules, a soft lead pencil, and this paper, he worked out thousands of design details and intricate wiring diagrams, then sent them to the drafting room for conversion into bona fide blueprints. He'd occasionally specify an impossible circuit or connection which would then be refigured with assistants.

Since the FT was the earliest mass-produced road unit, its 1939 conception may be termed the beginning of first-generation diesels for all practical purposes. Its predecessors clearly represented single ones and few-of-a-kind experimentals. Alco did achieve moderate success with its slant-nosed DL 109/110, a 2000 hp. passenger unit developed in 1940. Because the noted industrial designer, Otto Kuhler, who is still living, planned their car-body features, these units were dubbed "Kuhler diesels." New Haven took the bulk of production, 60 cabs from a total of 78, thus making wholesale inroads upon steam power used on its Shoreline expresses.

The ending of World War II and removal of WPB restrictions signaled the rapid entrance of other major loco builders into the road unit field. Emulating EMD's upgrading of its 1350 hp. FT to the 1500 hp. F3, Alco used its own 244-series engine with General Electric equipment while Baldwin adapted principles of the de la Vergne marine engine (which ran at 625 rpm. in all models) and Westinghouse equipment.

Using its famous opposed-piston power plant in hookup with either GE or Westinghouse components, Fairbanks-Morse & Co. leaped aboard the diesel bandwagon so quickly that its Beloit, Wis., assembly plant couldn't handle all the orders. The GE plant at Erie, Pa., received the overflow on a contract-assembly basis and produced 111 of the bulky-looking, 2000 hp. streamlined dual service units, 48 of which went to the Pennsy.

The late 1940's was a real diesel-seller's market, with nearly all railroads (but not Norfolk & Western) buying almost anything with a diesel engine, generator, and traction motors. The new power arriving at terminals created mixed emotions among the men. Some liked the cleanliness and easier work; others hated the new intruders; still others saw a puzzling challenge in the mastery of a completely new technology. The roundhouse foreman at New York Central's Avis, Pa., terminal (now abandoned) put it this way:

"I've spent a lifetime working with steam power; now here I am, due to retire in five years, expected to start from scratch and learn all about diesels. When anything goes wrong, I am supposed to come up with the remedy, as few of the men know much."

And at Shamokin, Pa., one sunny Sunday afternoon, Troy Brown, the Reading's foreman, explained: "They send two Alco units up here on weekends to save money, but dare not shut them down because I can't trust the crew to know how to get them started properly, so they must lay here all day with engines idling."

Forecasts of the complete demise of

**New in 1948, an NYC 1000 hp. Alco road-switcher powers a local at Oneonta, N.Y.**
Photograph by Bert Pennypacker

new steam construction came to Alco first, for in 1948 the last order it filled was for seven Pittsburgh & Lake Erie 2-8-4's. The following year, Baldwin and Lima produced their final steamers: 2-6-6-2 compounds for the Chesapeake & Ohio and 2-8-4's for the Nickel Plate. Significantly, the years 1947 through 1949 saw 6595 diesels ordered while these last years of new steam power yielded a meager total of only 146 ordered—and that was it for ever.

Lima had stuck with its theory of super-power steam ably conceived by Will Woodard in the 1920's, and hadn't turned out a diesel until the end of steam in 1949. With nowhere else to go, an alliance with the Hamilton engine company led to a small line of switchers and road-switchers. While all the other diesel builders claimed long experience of one kind or another, going back into the 1920's, as well as being firmly entrenched in the diesel market, Lima had little to offer. Its dismal showing saw but 198 units produced. Then, in 1951, the doors swung shut for the last time, and at Eddystone, Pa., a new sign went up: "Baldwin-Lima-Hamilton Corp."

Looking back at the vast army of first-generation units which today are fast disappearing, it's interesting to note that certain designs produced much less than satisfactory service, became the earliest victims of retirement and, indeed, led directly to the demise of three major builders, as we shall see shortly. A discussion of the positive and negative features of various diesels reveals a fascinating wealth of information.

Thanks to the Dilworthian theory of simplicity, EMD remained tops in sales, performance, and dependability. Its 1750 hp. GP9 hood unit became the biggest seller of all time, 3,969 of them going all over the U.S. and Canada. Dilworth said his Geeps were ugly, and we agree. He intended them strictly for branchline and local work, expressing disappointment when American railroading adopted the type for mainline and even passenger work. Unlike other builders, EMD designed and built its own electrical equipment under the able guidance of S. H. Cowin, while Eugene Kettering had much to do with developing the fantastically successful 567-series engine.

EMD's leadership also embodied a seeming paradox of lagging behind in certain areas, but in most cases this amounted to shrewd Dilworth tactics. Horsepower ratings fell behind other builders; EMD retained 1500 when others went up to 1600.

Later, the ratio became 1750 versus 1800, plus the fact that EMD didn't even engage in the Alco and FM 2400-hp. units of the mid-1950's. Perhaps the biggest point in EMD's favor involved the use of a low-pressure Roots blower to provide and scavenge air for the engine. Other builders used turbochargers which blow out at regular intervals, requiring a $3,000 replacement. With a sizable roster, such maintenance cost amounted to a considerable sum over the years.

Alco's best features included very sturdy underframes and the lowest continuous speed ratings of any make. This made them especially attractive for pusher and heavy drag work. We observed one really overdoing it, for we recall that a single Alco 1600-hp. RS3 owned by the Reading was once given 170 empties to pull westbound from Abrams yard. Well, she roared mightily, dug in on heavily sanded rails, and crawled up the mainline at something like 3-4 mph. Finally, at Birdsboro, the strain became too much; she just laid down and died.

Alco outscored EMD by having the first road-switcher types years in advance. Early models came out in 1940, but the real big beginning came in 1946, three years ahead of LaGrange. Perhaps the biggest bugaboo to plague Alco units through the years has been crankshaft problems. The company at one time claimed this to be the result of stifled development research during World War II, but such a claim could hardly hold water as late as second generation units of the early 1960's.

Baldwin units were put together like battleships, heavy and rugged. Enginemen liked this non-slip weight in starting heavy trains. The variety of almost custom made road units is of especial interest, ranging from Jersey Central's double end commuter type to the sharknose and 4-8-8-4 + 4-8-8-4 "centipedes" used principally by the Pennsy. Such a two-unit, 6000-h.p. monster once had a weighty coal train in tow, moving eastward along the Middle Division from Altoona.

Westbound on the same track and running against the current of traffic without cab signal indications, three EMD GP9's pulled a special "high and wide" consist that had to go through Spruce Creek tunnel on a center track to make high clearances. Well, someone got his orders mixed up and the two trains met head-on. The lead GP9 suffered extensive damage and had to be scrapped. The doughty Baldwin centipede received just a few front-end dents and was able to continue with her train!

"From ten-year-old Baldwin units, we pulled cylinder liners that looked almost perfect with little or no sign of

Photograph by Bert Pennypacker

**B&O had 36 of these Baldwin sharknose freighters. Pennsy was the biggest user.**

ar," said a Pennsy motive power of-
al.

This in itself is a testimonial to the
workmanship that went into the
dystone product, but other factors
to its downfall. Too much customi-
ion and mechanical complication
stened the end of Baldwin's long and
table loco-building career. Some of
machinery looked like Rube Gold-
rg contraptions and was a plumber's
ghtmare for maintenance and repair.
nnsy owned the most Baldwin units
far, 643, covering nearly every type
oduced.

Next to Lima's three-year fling as a
esel-builder, Fairbanks-Morse, after
veral early and isolated projects,
ass-produced units for the U.S. mar-
ts for 14 years, beginning in 1944.
om a total sale of about 1400 units,
itchers gained the most favor. The
00 hp. end cab hood unit ran very
ell, but master mechanics had few
mpliments for Trainmasters and
her road units. The opposed-piston
gine, which had gained wide fame in
dustrial and marine work, apparently
dn't prove adaptable to railroads.

We liked the high and bulky config-
ration of FM units, occasioned by the
ll OP engine. The hefty, 2400-hp.
rainmaster hoods with six traction
otors found wide favor in 1953-'56.
s FM's last design, 127 were sold.
outhern Pacific found them to be the
nly single unit diesel that could re-
lace big steam 4-8-2's and 4-8-4's pull-
g its San Francisco area commuter
rains where lengthy consists and quick
cceleration from many local stops put
evere demands upon the engine.

Reading bought Trainmasters as
unit reducers." One TM could handle
assenger trains over the hilly Bethle-
em branch that would otherwise re-
uire two of the 1500/1600 hp. units.
ut engine crews complained loudly
bout nauseating fumes that wafted
ack into the cab since the long hood
nd ran first. So dual controls were add-
ed and the short hood became the front end. Donald Kirk, a Lehigh Valley employee who formerly rode RDG train 357 to Bethlehem, where he works as a rate clerk, tells of a humorous experience.

"They called this train 'The Rocket,'" he says, "because it took nearly three hours to run 56.6 miles, making every stop for mail and express. It usually had a Trainmaster unit and while mail was being unloaded at Souderton, the fireman and a trainman went to a nearby lunchroom to buy hot coffee for the train crew.

"One morning, the fireman came out of the lunchroom to see his train accelerating out of town with a roar and cloud of blue smoke for which FM units were noted. Well, it seemed that the engineer didn't realize he had no fireman, otherwise he'd have waited when receiving the proceed signal. The undaunted left-hand rider hailed a nearby taxi, leaped in, slammed the door and bellowed 'Telford station and step on it!' The quick journey of just over a mile took only a couple minutes. At Telford, the errant fireman climbed triumphantly into the cab with his brown paper bag of hot coffee cups. I don't know what he said to the engineer."

Today, EMD alone has survived among first-generation builders. True, General Electric also built diesels, but prior to 1959 when they developed the U-series road units, GE's borderline effort consisted mostly of small switchers. Lima folded in 1951; Baldwin-Lima-Hamilton faded in 1956; FM faltered in 1958 and sent its last units to Mexico in 1963. Finally in 1969, the Schenectady Works of Alco flunked out, but rumors say that Canadian-built units may still be sold south of that border.

All this, combined with the normal attrition of diesels, has served to place many extinct and nearly-extinct types in the same historical category as steam power. The internal combustion vehicle has been with us in great numbers for a quarter-century and that's plenty of time to build up a sizeable storehouse of data and related lore.

Exactly when, and why, did the first generation of diesels end, and what determines the difference between a first- or second-generation unit?

To begin with, the useful life expectancy of a road unit has been determined to be 15 years, after which most repair costs become uneconomical. This is less than half the life span of a steam engine, but it must be remembered the diesel has run perhaps three or four times the total mileage accumulated by the steamer. Furthermore, while new diesel engines, generators, and traction motors are easily installed in a diesel, the rewiring of miles of circuits and thousands of connections is so expensive that it is better just to buy a new unit and get the improved technological advances, which would not be in a rewired older unit anyway.

So for all practical purposes, the second generation began in 1959 when Alco, EMD, and GE began offering newly designed units intended to replace the first generation that had been running up to 18 years. But most roads weren't quite ready then and the real burgeoning of second-generation sales didn't get going until the early to mid 1960's. It is almost unbelieveable, but just one road, the Pennsy—the country's biggest user of motive power—actually retired more than 800 first-generation diesels in the 1960's and prior to the Penn Central merger in 1968.

The '70's dawned with Baldwin and FM units becoming rare, while even commonplace types like EMD F7's and Geeps are being cut up with the same gusto accorded to steam locos when the decade of the 1950's dawned. For many types, it's already too late. There still remain a few choice ones; and if you're lucky or knowledgeable about such things, they can be observed and photographed. ●

Photograph by Bert Pennypacker

**Today this streamlined type of car body is called a "covered wagon" because of its early conception and rounded shape.**

# Southern Pacific Company

## Locomotive Roster Compiled by Sy Reich

**Espee mixed No. 953 makes its leisurely way across the Arizona desert from Clifton to Lordsbourg. Unit is a GP9.**
F.H. Worsfold, Box 64, El Cajon, Calif.

| Old Class | New Class | Numbers | | HP | Bldr. | Bldr.s' Model | Wheel Arngt. | Tractive Effort | Weight | Date | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DF-700 | ——— | Old 1 | No new numbers | 450 | GE | 50-ton | B-B | 25,500 | 102,000 | 1954 | 1 |
| S | ——— | Old 2 | No new numbers | 190 | Ply. | 20-ton | B | 12,500 | 50,000 | 1935 | 2 |
| DS-6 | ——— | Old 10 | No new numbers | 660 | A-GE | S1 | B-B | ? | ? | 1941 | 3 |
| DS-5 | ——— | Old 11 | No new numbers | 600 | EMD | SW1 | B-B | ? | ? | 1941 | 4 |
| DF-302 | ES 408-2 | Old 12-16 | New 1104-1108 | 800 | EMD | SW8 | B-B | 58,150 | 232,600 | 1953 | 3 |
| ? | ——— | Old 17 | No new numbers | 380 | GE | 44-ton | B-B | 26,400 | 88,000 | 1944 | 66 |
| DS-105 | ——— | Old 30-31 | No new numbers | 1000 | A-GE | S2 | B-B | ? | ? | 1943 | 3 |
| DS-105 | AS 410-3 | Old 32-33 | New 1721-1722 | 1000 | A-GE | S2 | B-B | ? | ? | 1943 | 3 |
| DS-105 | AS 410-3 | Old 34-35 | New 1723, ——— | 1000 | A-GE | S2 | B-B | ? | ? | 1943 | 3, 5 |
| DS-105 | AS 410-3 | Old 36-38 | New 1724-1726 | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1944 | 3 |
| DS-105 | AS 410-3 | Old 39-42 | New 1727-1730 | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1947 | 3 |
| DS-105 | AS 410-3 | Old 43-47 | New 1732-1735 | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1947 | 3 |
| DS-105 | AS 410-3 | Old 48 | New 1736 | 1000 | A-GE | S2 | B-B | ? | ? | 1947 | 3 |
| DS-105 | AS 410-3 | Old 49-53 | New 1737-1741 | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1947 | 3 |
| DS-105 | AS 410-3 | Old 54-61 | New 1742-1749 | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1947 | 3 |
| DS-105 | AS 410-3 | Old 62-71 | New 1750-1759 | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1949 | 3 |
| DS-109 | ES 410-2 | Old 72-88 | New 1914-1930 | 1000 | EMD | NW2 | B-B | 61,645 | 246,580 | 1949 | 3 |
| DS-105 | AS 410-3 | Old 89-94 | New 1760-1765 | 1000 | A-GE | S2 | B-B | 57,310 | 229,250 | 1950 | |
| DS-111 | AS 410-4 | Old 95-99 | New 1782-1786 | 1000 | A-GE | S4 | B-B | 57,480 | 229,930 | 1951 | |
| DS-111 | AS 410-4 | Old 100-104 | New 1787-1791 | 1000 | A-GE | S4 | B-B | 57,480 | 229,930 | 1951 | |
| DS-112 | BS 412-2 | Old 105-107 | New 2121-2123 | 1200 | BLHW | S-12 | B-B | 59,625 | 238,500 | 1952 | 3 |
| DF-400 | ES 412-1 | Old 108-112 | New 2208-2212 | 1200 | EMD | SW9 | B-B | 61,835 | 247,350 | 1953 | |
| DF-401 | ES 412-2 | Old 113-118 | New 2213-2218 | 1200 | EMD | SW1200 | B-B | 62,320 | 249,280 | 1954 | |
| DS-120 | FS 412-3 | Old 119-120 | New 2373-2374 | 1200 | FM | H12-44 | B-B | 61,193 | 244,770 | 1956 | 6 |
| DS-114 | BS 412-3 | Old 121-122 | New 2124-2125 | 1200 | BLHW | S-12 | B-B | 59,940 | 239,750 | 1952 | 7 |
| DF-402 | ES 412-3 | Old 123-128 | New 2219-2223, ——— | 1200 | EMD | SW1200 | B-B | 61,910 | 247,640 | 1957 | 3 |
| DF-119 | AS 616-2 | Old 155-158 | New 2856-2859 | 1600 | A-GE | RSD-5 | C-C | ? | ? | 1953 | 3 |
| DF-119 | AS 616-2 | Old 159-169 | New ———, 2861-2870 | 1600 | A-GE | RSD-5 | C-C | 81,690 | 326,750 | 1953 | 3 |
| DF-115 | AS 616-1 | Old 170 | New 2850 | 1600 | A-GE | RSD-5 | C-C | ? | ? | 1953 | 3 |
| DF-115 | AS 616-1 | Old 171-176 | New ———, 2851-2855 | 1600 | A-GE | RSD-5 | C-C | ? | ? | 1953 | 3 |
| DS-302 | BS 616-6 | Old 177-184 | New 177-184 | 1600 | BLHW | AS616 | C-C | 82,325 | 329,300 | 1952 | 3 |
| DS-303 | AS 616-5 | Old 185-186 | New 2886-2887 | 1600 | A-GE | RSD-5 | C-C | ? | ? | 1953 | 3 |
| DS-300 | BS 615-6 | Old 187-188 | New 187-188 | 1500 | BW | DRS 6-6-1500 | C-C | ? | ? | 1949 | 3 |
| DS-301 | BS 615-7 | Old 189-190 | New 189-190 | 1500 | BW | DRS 6-6-1500 | C-C | ? | ? | 1949 | 3 |
| DP-6 | ——— | Old 200-211 | No new numbers | 2000 | A-GE | PA-2 | A1A-A1A | 52,395 | 314,600 | 1949 | 3, 8 |
| DF-601 | EF 418-2 | Old 240-248 | New 3411-3420 | 1750 | EMD | GP9 | B-B | 63,125 | 252,500 | 1954 | 3 |
| DF-502 | AF 624-1 | Old 250-252 | New 5160-5162 | 2400 | A.Pr. | RSD-15 | C-C | 92,375 | 369,500 | 1959 | 9 |
| DF-602 | EP 418-1 | Old 280-281 | New 3000-3001 | 1750 | EMD | GP9 | B-B | 64,200 | 256,800 | 1954 | 10 |
| DF-602 | EF 418-3 | Old 282-283 | New 3421-3422 | 1750 | EMD | GP9 | B-B | 64,200 | 256,800 | 1954 | 10 |
| DF-1 | ——— | Old 300-337 | No new numbers | 1500 | EMD | F3A | B-B | 58,650 | 234,600 | 1947-8 | 3, 11 |
| Z-15 | EF 415C-1 | New 304 | SSW 304 | 1500 | EMD | GP7 | B-B | 61,787 | 247,148 | 1950 | |
| DF-4 | EF 415A-4 | Old 338-353 | New 338-353 | 1500 | EMD | F7A | B-B | 59,325 | 237,300 | 1949 | 3, 12 |
| DF-9 | EP 415A-3 | New 354-357 | Old 354-357 | 1500 | EMD | F7A | B-B | 62,115 | 248,450 | 1952 | 3 |
| DF-9 | EF 415A-9 | New 358-363 | Old 358-363 | 1500 | EMD | F7A | B-B | 59,325 | 237,300 | 1952-3 | 3, 13, 65 |
| DF-11 | EF 415A-11 | Old 364-381 | New 364-381 | 1500 | EMD | F7A | B-B | 62,055 | 248,220 | 1953 | 3, 13 65 |
| DF-600 | EF 418-1 | Old 400-410 | New 3400-3410 | 1750 | EMD | GP9 | B-B | 63,350 | 253,400 | 1954 | |
| DF-604 | EF 418-4 | Old 411-416 | New ———, 3424-3428 | 1750 | EMD | GP9 | B-B | 63,040 | 252,160 | 1954 | 3 |
| DF-604 | EF 418-4 | Old 417-428 | New 3429-3440 | 1750 | EMD | GP9 | B-B | 63,240 | 252,960 | 1955 | |
| DF-607 | EF 418-6 | Old 429-438 | New 3551-3560 | 1750 | EMD | GP9 | B-B | 63,210 | 252,830 | 1956 | |
| DF-611 | EF 418-7 | Old 439-448 | New 3561-3570 | 1750 | EMD | GP9 | B-B | 62,200 | 248,800 | 1956 | |
| DF-612 | EF 418-8 | Old 449-458 | New 3653-3662 | 1750 | EMD | GP9 | B-B | 62,215 | 248,860 | 1959 | |
| DF-1 | ——— | Old 500-525 | No new numbers | 1500 | EMD | F3B | B-B | 56,850 | 227,350 | 1947-8 | 3, 14 |
| DF-4 | ——— | Old 526-534 | No new numbers | 1500 | EMD | F7B | B-B | 61,850 | 247,400 | 1949 | 15 |
| DF-4 | EF 415B-4 | New 535-539 | Old 535-539 (Second) | 1500 | EMD | F7B | B-B | 61,850 | 247,400 | 1949 | 3, 16 |
| DF-7 | EF 415B-7 | Old 538-541 (First) | New 8286-8289 | 1500 | EMD | F7B | B-B | 57,560 | 230,250 | 1951 | 55 |
| DF-4 | EP 415B-1 | New 540-541 | Old 540-541 (Second) | 1500 | EMD | F7B | B-B | 61,850 | 247,400 | 1949 | 16 |
| DF-10 | EP 415B-3 | New 542-545 | Old 542-545 | 1500 | EMD | F7B | B-B | 62,950 | 251,800 | 1952 | 3, 65 |
| DF-9 | EF 415B-9 | Old 546-547 | New ———, 547 | 1500 | EMD | F7B | B-B | 61,656 | 246,250 | 1953 | 17 |
| DF-13 | EF 415B-13 | Old 548-553 | New 548-551, ———, 553 | 1500 | EMD | F7B | B-B | 61,400 | 245,610 | 1953 | 3, 17, 65 |
| DF-14 | EF 418A-1 | New 600-601 | Old 600-601 | 1750 | EMD | F9A | B-B | 62,010 | 248,050 | 1954 | 11, 65 |
| DF-14 | EF 418A-1 | New 602 | Old 602 | 1750 | EMD | F9A | B-B | 62,010 | 248,050 | 1955 | 3, 11 |
| DF-14 | EF 418A-1 | New 603-606 | Old 603-606 | 1750 | EMD | F9A | B-B | 62,010 | 240,050 | 1955 | 3, 11, 65 |
| DF-14 | EF 418A-1 | Old 607-613 | New 607-611, ———, 613 | 1750 | EMD | F9A | B-B | 62,010 | 240,050 | 1955-6 | 3, 11, 65 |

| Old Class | New Class | Numbers | | HP | Bldr. | Bldr.s' Model | Wheel Arngt. | Tractive Effort | Weight | Date | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DF-14 | EF 418A-1 | Old 614-616 | New 614-616 | 1750 | EMD | F9A | B-B | 62,010 | 240,050 | 1956 | 3, 11 |
| DF-14 | EF 418A-1 | Old 617-637 | New 617-632, ———, 633-637 | 1750 | EMD | F9A | B-B | 62,010 | 240,050 | 1956 | 3, 11, 65 |
| DF-14 | EF 418B-1 | New 700-703 | Old 700-703 | 1750 | EMD | F9B | B-B | 61,340 | 245,360 | 1954 | 3, 14 |
| DF-14 | EF 418B-1 | New 704-705 | Old 704-705 | 1750 | EMD | F9B | B-B | 61,340 | 245,360 | 1955 | 3, 14 |
| DF-14 | EF 418B-1 | New 706-710 | Old 706-710 | 1750 | EMD | F9B | B-B | 61,340 | 245,360 | 1955 | 3, 14 |
| DF-14 | EF 418B-1 | New 711-716 | Old 711-716 | 1750 | EMD | F9B | B-B | 61,340 | 245,360 | 1955-6 | 3, 14, 65 |
| DF-14 | EF 418B-1 | New 717-718 | Old 717-718 | 1750 | EMD | F9B | B-B | 61,340 | 245,360 | 1956 | 3, 14, 65 |
| DF-14 | EF 418B-1 | New 719-725 | Old 719-725 | 1750 | EMD | F9B | B-B | 61,340 | 245,360 | 1956 | 3, 14 |
| E-15 | EF 415AC-1 | SSW 925-937 odd only | New 925, ———, 929-933, ———, 937 odd only | 1500 | EMD | F7A | B-B | 55,840 | 228,890 | 1950 | 18 |
| E-15 | EF 415BC-1 | SSW 926-932 even only | New ———, 928, 932 | 1500 | EMD | F7B | B-B | 55,540 | 227,330 | 1950 | 18 |
| E-15 | EF 415BC-1 | SSW 934 | New 934 | 1500 | EMD | F7B | B-B | 56,430 | 230,870 | 1950 | 18 |
| E-15 | EF 415BC-1 | SSW 936-938 | No new numbers | 1500 | EMD | F7B | B-B | 56,370 | 230,630 | 1951 | 18 |
| E-15 | EF 415AC-1 | SSW 939 | New 939 | 1500 | EMD | F7A | B-B | 56,310 | 230,770 | 1950 | 18 |
| E-15 | EF 415BC-2 | SSW 940-950 even only | New 940, ———, 944-948, ———, even only | 1500 | EMD | F7B | B-B | 55,910 | 228,790 | 1951 | 18 |
| E-15 | EF 415AC-1 | SSW 941-947 odd only | New ———, 943-947 odd only | 1500 | EMD | F7A | B-B | 56,820 | 232,810 | 1951 | 18 |
| E-15 | EF 415AC-2 | New 949-959 odd only | SSW 949-959 odd only | 1500 | EMD | F7A | B-B | 56,440 | 231,260 | 1951 | 18 |
| E-15 | EF 415BC-3 | SSW 952-958 even only | New 952, 954, ———, ——— | 1500 | EMD | F7B | B-B | 55,940 | 228,910 | 1952 | 18 |
| E-15 | EF 415AC-3 | New 961-967 odd only | SSW 961-967 odd only | 1500 | EMD | F7A | B-B | 56,450 | 231,320 | 1952 | 18 |
| E-15 | EF 415AC-3 | New 969-975 odd only | SSW 969-975 odd only | 1500 | EMD | F7A | B-B | 56,960 | 233,370 | 1952 | 18 |
| DS-1 | ES 406-1 | New 1000 | Old 1000 | 600 | EMC | SW1 | B-B | 49,600 | 198,300 | 1939 | 19 |
| DS-2 | ——— | Old 1001 | No new number | 660 | Alco | HH 660 | B-B | 49,500 | 197,900 | 1939 | 3 |
| DS-3 | ——— | Old 1002-1003 | No new numbers | 660 | Alco | HH 660 | B-B | 49,200 | 196,700 | 1939 | 3 |
| DS-4 | ES 406-2 | New 1004-1009 | Old 1004-1009 | 600 | EMC | SW1 | B-B | 49,670 | 198,680 | 1939 | 3, 20 |
| DS-5 | ES 406-3 | Old 1010-1016 | New 1010-1014, ———, 1016 | 600 | EMD | SW1 | B-B | 49,845 | 199,380 | 1941 | 3, 21 |
| DS-6 | ——— | Old 1017-1020 | No new numbers | 660 | A-GE | S1 | B-B | 49,500 | 197,800 | 1941 | 3, 67 |
| DS-7 | ——— | Old 1021-1022 | No new numbers | 660 | Bald | VO 660 | B-B | 49,390 | 197,560 | 1941 | 3 |
| DS-8 | AS 407-1 | New 1023-1032 | Old 1023-1032 | 660 | A-GE | S3 | B-B | 48,990 | 195,950 | 1951 | 3, 67 |
| DS-9 | AS 409-1 | Old 1033-1039 | New 1200-1206 | 900 | A.Pr. | S6 | B-B | 58,195 | 232,780 | 1955 | |
| DS-9 | AS 409-1 | Old 1040-1051 | New 1207-1218 | 900 | A.Pr. | S6 | B-B | 58,195 | 232,780 | 1955 | 3 |
| DS-10 | AS 409-2 | Old 1052 | New 1219 | 900 | A.Pr. | S6 | B-B | 58,195 | 232,780 | 1955 | |
| DS-11 | AS 409-3 | Old 1053-1072 | New 1220-1239 | 900 | A.Pr. | S6 | B-B | 58,080 | 232,310 | 1956 | |
| DS-12 | AS 409-4 | Old 1073-1090 | New 1240-1257 | 900 | A.Pr. | S6 | B-B | 57,930 | 231,730 | 1956 | |
| DS-13 | ——— | Old 1091 | No new number | 750 | BW | DS 4-4-750 | B-B | ? | ? | 1950 | 22 |
| DS-600 | ES 408-1 | New 1100 | Old 4600 | 800 | EMD | TR6A | B-B | 51,715 | 206,870 | 1950 | 23, 62 |
| DS-600 | ES 408-1 | New 1101-1103 | Old 4601-4603 | 800 | EMD | TR6A | B-B | 51,715 | 206,870 | 1951 | 23 |
| DS-602 | ES 408-2 | New 1104-1108 | Old 12-16 | 800 | EMD | SW8 | B-B | 58,150 | 232,600 | 1953 | 23 |
| DS-602 | ES 408-2 | New 1109-1116 | Old 4604-4611 | 800 | EMD | SW8 | B-B | 52,875 | 211,500 | 1953 | 23 |
| DS-603 | ES 408-3 | New 1117-1126 | Old 4612-4621 | 800 | EMD | SW8 | B-B | 55,265 | 221,060 | 1953 | 23 |
| DS-604 | ES 408-4 | New 1127-1128 | Old 4622-4623 | 800 | EMD | SW8 | B-B | 57,335 | 229,340 | 1954 | 23 |
| DS-601 | ES 408B-1 | New 1150 | Old 4700 | 800 | EMD | TR6B | B-B | 51,715 | 206,860 | 1950 | 23, 62 |
| DS-601 | ES 408B-1 | New 1151-1153 | Old 4701-4703 | 800 | EMD | TR6B | B-B | 51,715 | 206,860 | 1951 | 23 |
| DS-605 | ES 409-1 | New 1170-1171 | Old 4624-4625 | 900 | EMD | SW900 | B-B | 58,150 | 232,600 | 1954 | 23 |
| DS-606 | ES 409-2 | New 1172-1179 | Old 4626-4633 | 900 | EMD | SW900 | B-B | 59,180 | 236,720 | 1954 | 23 |
| DS-9 | AS 409-1 | New 1200-1206 | Old 1033-1039 | 900 | A.Pr. | S6 | B-B | 58,195 | 232,780 | 1955 | |
| DS-9 | AS 409-1 | New 1207-1218 | Old 1040-1051 | 900 | A.Pr. | S6 | B-B | 58,195 | 232,780 | 1955 | 3, 67 |
| DS-10 | AS 409-2 | New 1219 | Old 1052 | 900 | A.Pr. | S6 | B-B | 58,195 | 232,780 | 1955 | |
| DS-11 | AS 409-3 | New 1220-1239 | Old 1053-1072 | 900 | A.Pr. | S6 | B-B | 58,080 | 232,310 | 1956 | |
| DS-12 | AS 409-4 | New 1240-1257 | Old 1073-1090 | 900 | A.Pr. | S6 | B-B | 57,930 | 231,730 | 1956 | |
| DS-607 | AS 409-5 | New 1270-1281 | Old 4634-4645 | 900 | A.Pr. | S6 | B-B | 58,820 | 235,280 | 1955-6 | 23 |
| DS-100 | AS 410-1 | Old 1300-1309 | New 1700, ——— | 1000 | A-GE | S2 | B-B | 58,000 | 231,900 | 1941 | 3, 65 |
| DS-101 | ES 410-1 | Old 1310-1319 | New 1904-1913 | 1000 | EMD | NW2 | B-B | 62,100 | 248,300 | 1941 | 3 |
| DS-102 | ——— | Old 1320-1321 | No new numbers | 1000 | Bald | VO 1000 | B-B | 59,200 | 236,800 | 1941 | 3, 65 |
| DS-102 | ——— | Old 1322-1324 | No new numbers | 1000 | Bald | VO 1000 | B-B | 59,200 | 236,800 | 1941 | 3, 65 |
| DS-103 | ——— | Old 1325-1329 | No new numbers | 1000 | Bald | VO 1000 | B-B | 59,700 | 238,800 | 1942 | 3, 65 |
| DS-104 | AS 410-2 | Old 1330-1331 | New 1701-1702 | 1000 | A-GE | S2 | B-B | 57,700 | 230,800 | 1942 | 3 |
| DS-104 | ——— | Old 1332-1333 | No new numbers | 1000 | A-GE | S2 | B-B | 57,700 | 230,800 | 1942 | 65 |
| DS-104 | AS 410-2 | Old 1334-1344 | New ———, ———, 1703, ———, ———, 1704, ———, ———, 1705, ——— | 1000 | A-GE | S2 | B-B | 57,700 | 230,800 | 1942 | 3, 65 |
| DS-105 | ——— | Old 1345-1346 | No new numbers | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1943 | 3, 65 |
| DS-105 | AS 410-3 | Old 1347-1348 | New 1706, ——— | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1943 | 65 |
| DS-105 | AS 410-3 | Old 1349-1354 | New 1707-1708, ———, 1709-1710, ——— | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1943 | 65 |
| DS-105 | AS 410-3 | Old 1355-1360 | New 1711-1712, ———, 1713, ———, 1714 | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1943 | 3 |
| DS-105 | ——— | Old 1361 | No new numbers | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1943 | 3 |
| DS-105 | AS 410-3 | Old 1362-1367 | New ———, ——— 1715-1718 | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1944 | 3 |
| DS-105 | ——— | Old 1368 | No new number | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1944 | 65 |
| DS-105 | ——— | Old 1369 | No new number | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1944 | 3 |
| DS-105 | AS 410-3 | Old 1370 | New 1720 | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1944 | 3 |
| DS-107 | ——— | Old 1371-1372 | No new numbers | 1000 | Bald | VO 1000 | B-B | 59,400 | 237,500 | 1944 | 3 |
| DS-107 | BS 410-3 | Old 1373 | New 1859 | 1000 | Bald | VO 1000 | B-B | 59,400 | 237,500 | 1944 | 3 |
| DS-107 | ——— | Old 1374 | No new numbers | 1000 | Bald | VO 1000 | B-B | 59,400 | 237,500 | 1944 | 65 |
| DS-106 | BS 410-2 | Old 1375-1376 | New 1856-1857 | 1000 | Bald | VO 1000 | B-B | 59,000 | 236,000 | 1943 | 3 |
| DS-107 | ——— | Old 1377 | No new number | 1000 | Bald | VO 1000 | B-B | 59,400 | 237,500 | 1943 | 3 |
| DS-107 | ——— | Old 1378 | No new number | 1000 | Bald | VO 1000 | B-B | 59,400 | 237,500 | 1943 | 3 |
| DS-107 | ——— | Old 1379 | No new number | 1000 | Bald | VO 1000 | B-B | 59,400 | 237,500 | 1944 | 65 |
| DS-107 | BS 410-3 | Old 1380-1382 | New 1860-1862 | 1000 | Bald | VO 1000 | B-B | 59,400 | 237,500 | 1944 | 3 |
| DS-107 | ——— | Old 1383 | No new number | 1000 | Bald | VO 1000 | B-B | 59,400 | 237,500 | 1944 | 65 |
| DS-107 | ——— | Old 1384-1385 | No new numbers | 1000 | Bald | VO 1000 | B-B | 59,400 | 237,500 | 1944 | 3 |
| DS-105 | AS 410-3 | Old 1386-1392 | New 1766, ———, ———, ———, 1767, ———, 1768 | 1000 | A-GE | S2 | B-B | 57,900 | 231,700 | 1944 | 3, 65 |
| DS-108 | BS 410-4 | Old 1393-1402 | New 1863, ———, ———, 1864-1865, ———, 1866-1869 | 1000 | BW | DS 4-4-1000 | B-B | 57,275 | 229,100 | 1948 | 3, 65 |
| DS-109 | ES 410-2 | Old 1403-1425 | New 1931-1953 | 1000 | EMD | NW2 | B-B | 61,645 | 246,580 | 1949 | |
| DS-105 | AS 410-3 | Old 1426-1441 | New 1769-1776, ———, ———, 1777-1781 | 1000 | A-GE | S2 | B-B | 57,310 | 229,250 | 1950 | 3, 65 |
| DS-110 | BS 412-1 | Old 1442-1455 | New 2100-2113 | 1200 | BLHW | S-12 | B-B | 59,090 | 236,350 | 1951 | 3 |
| DS-110 | BS 412-1 | Old 1456-1463 | New 2114-2120 | 1200 | BLHW | S-12 | B-B | 59,090 | 236,350 | 1951 | |
| DS-111 | AS 410-4 | Old 1464-1470 | New 1792-1798 | 1000 | A-GE | S4 | B-B | 57,480 | 229,930 | 1951 | |
| DS-111 | AS 410-4 | Old 1471-1485 | New 1799-1813 | 1000 | A-GE | S4 | B-B | 57,480 | 229,930 | 1952 | 3 |
| DS-113 | FS 412-1 | Old 1486-1491 | New 2350-2355 | 1200 | FM | H12-44 | B-B | 62,000 | 248,000 | 1952 | |
| DS-114 | BS 412-3 | Old 1492-1513 | New 2126-2145 | 1200 | BLHW | S-12 | B-B | 59,940 | 239,750 | 1952-3 | |
| DS-115 | AS 410-5 | Old 1514-1525 | New 1814-1825 | 1000 | A-GE | S4 | B-B | 57,600 | 230,400 | 1952-3 | |

| Old Class | New Class | Numbers | | HP | Bldr. | Bldr.s' Model | Wheel Arngt. | Tractive Effort | Weight | Date | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DS-115 | AS 410-5 | Old 1526-1528 | New 1826-1828 | 1000 | A-GE | S4 | B-B | 57,600 | 230,400 | 1953 | |
| DS-117 | FS 412-2 | Old 1529-1535 | New 2356-2362 | 1200 | FM | H12-44 | B-B | 62,250 | 248,000 | 1952 | |
| DS-117 | FS 412-2 | Old 1536-1538 | New 2363-2365 | 1200 | FM | H12-44 | B-B | 62,250 | 249,000 | 1953 | |
| DS-118 | BS 412-4 | Old 1539-1550 | New 2146-2157 | 1200 | BLHW | S-12 | B-B | 62,185 | 248,750 | 1953 | |
| DS-119 | AS 410-6 | Old 1551-1557 | New 1829-1835 | 1000 | Alco | S4 | B-B | 61,660 | 246,650 | 1955 | |
| DS-119 | AS 410-6 | Old 1558-1567 | New 1836-1845 | 1000 | Alco | S4 | B-B | 61,660 | 246,650 | 1955 | |
| DS-120 | FS 412-3 | Old 1568-1571 | New 2366-2369 | 1200 | FM | H12-44 | B-B | 61,193 | 244,770 | 1956 | |
| DS-120 | FS 412-3 | Old 1572-1574 | New 2370-2372 | 1200 | FM | H12-44 | B-B | 61,193 | 244,770 | 1956 | |
| DS-120 | FS 412-3 | Old 1575-1576 | New 2373-2374 | 1200 | FM | H12-44 | B-B | 61,193 | 244,770 | 1956 | 6 |
| DS-121 | FS 412-4 | Old 1577-1586 | New 2375-2384 | 1200 | FM | H12-44 | B-B | 61,335 | 245,340 | 1956 | |
| DS-122 | FS 412-5 | Old 1587-1596 | New 2385-2394 | 1200 | FM | H12-44 | B-B | 61,230 | 244,920 | 1957 | |
| DS-123 | ES 412-4 | Old 1597-1606 | New 2262-2271 | 1200 | EMD | SW1200 | B-B | 62,180 | 248,720 | 1964-5 | |
| DS-124 | ES 412-5 | Old 1607-1623 | New 2272-2288 | 1200 | EMD | SW1200 | B-B | 62,370 | 249,470 | 1965 | |
| DS-205 | GS 404-2 | New 1652 | Old 1652 | 380 | GE | 44-ton | B-B | 22,000 | 88,000 | 1944 | 24 |
| DS-100 | AS 410-1 | New 1700 | Old 1300 | 1000 | A-GE | S2 | B-B | 58,000 | 231,900 | 1941 | 3 |

*(This Southern Pacific roster will be continued next month.)*

## Southern Pacific Roster Notes

Roster based on data from SP's news editor and GE's manager of locomotive pricing and remanufacturing operations. Roster is accurate as of Dec. 18, 1969.

Locomotive builders GE, General Electric Co.; Ply., Plymouth; A-GE, American Locomotive Co.-General Electric Co.; EMD, General Motors-Electro Motive Div.; BLHW, Baldwin-Lima-Hamilton-Westinghouse; FM, Fairbanks-Morse; BW, Baldwin-Westinghouse; A.Pr., Alco Products; Alco, American Locomotive Co.; EMC, General Motors-Electro Motive Corp.; Bald, Baldwin Locomotive Works; KM, Krauss Maffei.

Most SP and SSW diesels were renumbered and reclassed in 1965. Column headed "Old Class" lists class prior to renumbering; column "New Class" lists class after renumbering. If "A" follows three digit number of a new class designation, such units are cab units. If "B" follows, units are booster units. If "C" precedes dash of a new class designation, units are assigned to and lettered for St. Louis-Southwestern (SSW).

The first column under heading "numbers" lists all old and new SP diesel nos. in numerical order. Numbers assigned before 1965 are listed as "Old"; those after 1965 are listed as "New." Old numbers between 2 and 725, unless otherwise noted, are for units that were assigned to Texas & New Orleans.

Second column under heading "numbers" lists other numbers for units. If first column has old numbers, second column has new numbers; if first column has new numbers, second has old numbers. Thus, every group of units is listed at least twice in column one; once under its old number and once under its new number. Exceptions are units bought after, or scrapped before renumbering. If old numbers and new numbers are alike, i.e. if units were not renumbered, only units that existed in 1965 (time of renumbering) are listed under "New" numbers. If a blank is in second column, the units received more than one set of new numbers. (Details can be found in the numbered notes.) SSW in second column indicates the number the unit had on SSW before renumbering; SSW class is shown in "Old Class" column. Some of these units also received an old SP class (not shown).

(1) Narrow-gage unit; sold to Compania Minera de Cananea, SA de CV, renumbered 61-8.

(2) 2 sold to Pacific Electric, renumbered 1646.

(3) The following units, not otherwise accounted for in notes, are no longer on the roster: 10-11, 30-31, 35, 128, 159, 171, 177-184, 187-190, 300, 302-303, 306, 305, 309, 351-353, 356-357, 359, 367, 370, 372, 374, 411, 502-403, 506-507, 535-539, 542, 550-551, 602, 604, 606-611, 613-617, 619, 621-624, 627-628, 630-637, 700-703, 706-712, 715, 718-720, 722-723, 725, 1001-1003, 1008-1009, 1014-1015, 1017-1019, 1021-1022, 1026-1030, 1032, 1091, 1107, 1301-1304, 1307-1308, 1320, 1323, 1325-1327, 1329, 1334, 1338, 1342, 1341, 1345, 1357, 1359, 1361-1363, 1369, 1371-1372, 1377-1378, 1384-1385, 1387-1388, 1391, 1394, 1435, 1447, 1652, 1700-1725, 1727, 1731-1733, 1735-1740, 1742, 1745, 1747, 1752, 1755, 1766-1768, 1805, 1850-1854, 1856-1857, 1859-1862, 1864, 1866-1868, New 1902-1903, 1913, 1930, 2108, 2123, 2850-2860, 2862-2864, 2866-2869, 2871-2872, 2875, 2877, 2884, 2886-2890, 3414, 3442, 3450, 3469, 3480, 3517, 3521, 3535, 3930, 3941, 3961, 4070, 4900, 4902-4905.

5102, 5106-5107, 5110-5113, 5115-5116, 5118-5120, 5200-5203, 5205-5206, 5209-5211, 5213, 5217, 5220-5232, 5234-5238, 5240-5248, 5252, 5254-5256, (1st), 5258-5264.

5267-5269, 5271, 5276-5278, 5336-5339, 5353, 5358, 5445-5447, 5698, 5714, 5900-5911, 5913-5924, 6000-6008, 6010-6018, 6020-6021, 6023-6027, 6029-6030, 6033-6045, 6047, 6052, 6056, 6059, 6063-6065, 6138-6170, 6172-6180, 6182-6185, 6187-6189, 6191-6199, 6202, 6205-6229, 6231-6278, 6280-6302, 6304-6306, 6308, 6310-6314, 6316-6318, 6320, 6322-6323, 6325, 6328-6333, 6335-6336, 6338-6341, 6343, 6345-6348, 6350-6354, 6356-6357, 6361, 6364-6365, 6369, 6374-6375, 6377, 6381, 6383, 6385, 6390, 6393-6395, 6397-6399, 6404-6407, 6410, 6415, 6417-6421, 6424-6425, 6428, 6431, 6433, 6435, 6438-6439, 6445, 6452, 6464-6466, 6468-6469.

8023, 8026-8035, 8038-8047, 8051-8079, 8081-8087, 8090, 8092-8096, 8099, 8101-8102, 8107, 8110, 8112, 8115, 8119-8121, 8123-8125, 8129-8130, 8133-8135, 8138-8141, 8143-8146, 8148-8150, 8152-8156, 8158-8165, 8167-8180, 8182-8187, 8189-8208, 8210-8223, 8226-8232, 8234-8236, 8238-8245, 8247-8248, 8250, 8252-8259, 8261-8262, 8264-8270, 8272-8275, 8277-8278, 8283-8285, 8287, 8289, 8298, 8301, 8304, 9100-9112, 9114-9120.

(4) 11 was renumbered SP MW 549, (5/63) and was retired in 1967.

(5) 34-35 renumbered 1362-1363 (2nd), then 1723, ———.

(6) 119-120 renumbered 1575-1576, then 2373-2374.

(7) 1498, 1505 renumbered 121-122, then 2124-2125.

(8) 200-211 renumbered 6059-6063, 6055-6058, 6064-6066.

(9) 4816-4818 (1st) renumbered 250-252, then 5160-5162.

(10) 280-283 renumbered 5894-5895, 5892-5893, then 3000-3001, 3421-3422; 3422 renumbered 3010.

(11) 300-337 originally 6100-6121, 6136-6137, 6124-6125, 6122-6123, 6132-6133, 6126-6131, 6134-6135; 304, 307-308, 310-337 rebuilt to F9A's and renumbered to 600-637 series, 301 was scrapped.

(12) 338-353 originally 6187, 6189, 6188, 6221, 6212, 6205, 6200, 6198, 6220, 6199, 6197, 6213, 6196, 6201, 6186, 6204; 338-350 renumbered back to original numbers.

(13) 358, 361, 363-364, 366, 373, 380-381 renumbered 6466-6467, 6470, 6463, 6468-6469, 6464-6465.

(14) 500-525 originally 8000-8021, 8036-8037, 8024-8025; 500-501, 504-505, 508-525 rebuilt to F9B's and renumbered in 700 series.

(15) 526-534 originally 8101, 8087, 8104, 8112, 8096, 8120, 8121, 8099, 8086; Units were renumbered back to original numbers.

(16) 535-541 originally 8089, 8105, 8100, 8098, 8113, 8088, 8097.

(17) 546, 552 renumbered 8304-8305.

(18) 925-959, 961-975 odd only; 1900-1901; 2800-2816; 2888-2890 were traded to GM-EMD for new power.

(19) 1000 was sold to Holly Sugar, renumbered 1 but Holly Sugar claims it did not buy it.

(20) 1005 renumbered SPMW 566 (10/26/67); 1006 sold to Bethlehem Steel, renumbered 15. (2nd).

(21) 1016 was sold to Bethlehem Steel (1969), renumbered 18.

(22) 1091 was originally BW plant switcher, then Weyerhaeuser 301 (1/29/56), then SP was supposed to be renumbered 1091 but instead was sold to the Texas-South Eastern and renumbered 301 (1958).

(23) Old class DS-600—DS-607 originally old class DF-300—DF-307.

24) 1652 originally Pacific Electric 1652, then SP 1652, then sold to Assoc. Metals (1967).

(25) These units never carried their new numbers; were traded to GM-EMD for new power.

(26) 1900 (1st) sold to Purdy Co.; 1901 (1st) sold to Arcata & Mad River, renumbered 105; 1902 (1st) was scrapped; 1903 (1st) originally Visalia Electric 501, then SP 1903 (1st), then Petaluma & Santa Rosa 4 was sold to Assoc. Metals; 1904 (1st) originally P&SR 1, then SP 1904 (1st), then Pacific States Steel 1904, then Howard Terminal 9; 1905 (1st) originally Lehigh Valley 61, then Rio Grande & Eagle Pass 10, then SP 1905 (1st) was sold to Purdy Co.

(27) Old class DF-400—DF-402 reclassed old class DS-400—DS-402.

(28) SSW 350-355 originally SSW 311 (1st)—312, 315-318.

(29) 2900-2902 originally A.Pr. demonstrators.

(30) 3020-3021 originally FM demonstrators TM3-TM4, then SP 4800-4801, then SP 3020-3021.

31) 4084-4087 were originally EMD demonstrators 5625-5628, then SP 7234-7237, then SP 4084-4087.

(32) 7100-7103 were originally A.Pr. demonstrators 628-1-628-4, then SP 4870-4873 then SP 7100-7103.

(33) 4900 was originally 5227, then 5500, then 4900; 4901-4905 were originally 5501-5505, then 4901-4905; units are all boosters.

(34) DF-200—DF-206 were reclassed DS-500—DS-506.

(35) 5101, 5114 were sold to National Metal and Steel, renum. 506, 511 (1968); 5104-5105 sold to Weyerhaeuser, renum. 104-105 (4/61). 5108 was sold to the Santa Maria Valley, used for parts, then scrapped, 5117 sold to White City Terminal & Utility, renumbered 5117 (11/66).

(36) 5204, 5207, 5253 were sold to McCloud River renumbered 35, 36 (1st), 34. McCloud River 35 was sold to U.S. Steel, 5207 was scrapped without being operated as 36 (1st); McCloud River 34 was sold to Oregon & Northwestern, renumbered 4.

(37) 5223 was rebuilt to 1600 hp; received new class BS 616-1.

(38) 5239, 5274 sold to the Oregon & Northwestern, renumbered 2-3 (11/64, 6/68).

(39) 5249 was sold to the Trona, renumbered 53 (11/60), still in service.

(40) 5250-5251 were sold to Kaiser Bauxite, renumbered 106, 105 (1961). 106 was renumbered 5106. 105 sold to Alumina Partners of Jamaica.

(41) 5272-5273, 5275 sold to Rayonier, Inc., renumbered 70 (11/67), 45 (12/61) and 90 (1/62).

(42) 5257 was sold to Roscoe, Snyder & Pacific, renumbered 400 (1/68); sold to Pine St. Salvage.

(43) 5294-5307 traded to A.Pr. for new power.

(44) 5900-5915 were originally 6000B, C-6004B, C, 6005B-6010B, then 5900-5915.

(45) 5916-5917 were originally SP-Union Pacific-Chicago & Northwestern SF-8 and SF-9, then UP 908B-909B, then UP 986BJ-986CJ, then SP 6011B,C, then SP 5916-5917.

(46) These units were rerated to 2000 hp.

(47) 6000-6010 were originally 6000A-6010A.

(48) 6017 was originally SP-UP-CNW SF-1, then UP 901A, then UP 983J, then SP 6011A, then SP 6017; this unit has been rebuilt to an E7A.

(49) 6067-6068 were originally SSW 300-301, then SP 6067-6068, then traded to GE for new power, then sold to Precision Engineering who scrapped them.

(50) 6378, 6380 sold to the Wellsville, Addison & Galeton; renumbered 2100, 2000, then sold to Louisiana & North West and renumbered 46, 45.

(51) 6190, 6203 were class EP 415A-1; 6383, 6386, 6388-6391, 6393 are class EP 415A-2; 6441-6442, 6445-6446 are class EP 415A-4.

(52) SSW 780-781 originally supposed to be SP 7762-7763, were transferred to SSW and relettered at factory.

(53) 7025-7028 were oriainally GE demonstrators 7025-7028, then SP 7025-7028.

54) 8091-8092, 8095, 8103, 8106, 8108-8109, 8111, 8114, 8118, 8122, 8126-8129, 8134-8137, 8139 are classed EP 415B-1; 8290-8291, 8293-8294, 8296-8298, 8301-8303 are classed EP 415B-2.

(55) 8286-8289 were originally 538-541 (1st) then 8286-8289; 6424-6439 may have originally been 338-353 (1st).

(56) Old 8400-8402 renumbered New 9500-9502, then 9900-9902.

(57) Old 8500-8502 renumbered New 9550-9552, then 9950-9952.

(58) 9113 was renumbered SPMW 1166, then 8799.

59) Old 9018-9020 renumbered New 9150-9152, then 9800-9802.

(60) 9102-9105 were originally Denver & Rio Grande Western 4001-4003, then SP Old 9021-9023, then SP New 9102-9105.

(61) These units were rerated to 3600 hp.

(62) 1100, 1150 originally GM-EMD demonstrators 1600, 1600B, then SP 4600, 4700, then SP 1100, 1150.

(63) 2715 was originally GM-EMD demonstrator 990, then SP 5308, then SP 2715.

(65) Following units were traded to GE for new power and were scrapped: 378, 543, 548, 625, 714, 717, 1337, 1346, 1389, 6031, 6062, 6171, 6203, 6327, 6334, 6344, 6358, 6373, 6467, 8108, 8111, 8116, 8132, 8136-8137, 8233, 8249, 8271, 8280.

Following units were traded to GE for new power, sold to Precision Engnrg. by GE and scrapped: 362, 369, 600-601, 605, 612, 713, 1305-1306, 1309, 1321-1322, 1324, 1328, 1332-1333, 1335, 1340, 1344, 1348, 1351, 1354, 1368, 1374, 1379, 1383, 1395, 1398, 1434, 1441, 5212, 5214-5216, 5265, 5482, 5912, 6009, 6019, 6022, 6028, 6032, 6055, 6057-6058, 6060-6061, 6066-6068, 6181, 6200, 6230, 6307, 6319, 6321, 6324, 6326, 6372, 6386, 6391, 6396, 6401, 6409, 6412, 6413, 6434, 8022, 8048-8050, 8080, 8117, 8126, 8131, 8142, 8147, 8151, 8157, 8166, 8181, 8188, 8209, 8224, 8237, 8246, 8251, 8260, 8263, 8276, 8279, 8281, 8282, 8286, 8293, 8297, 8302, 8305.

Following units were traded to GE for new power, and sold by GE to Wellsville, Addison & Galeton: 365, 379, 6309, 6378, 6380, 6443. One unit, 6379, was traded to GE for new power and sold to Louisiana & North West; 6379 was renumbered L&NW 44 (7/68). 6378, 6380 were renumbered WAG 2100, 2000 (7/68), then sold to L&NW and renumbered 46, 45.

(66) 17 was originally Pacific Electric 1654, then T&NO 17, then sold to W.T. Carter & Bother, renumbered 17. It is leased to Moscow, Camden & San Augustine as their number 17.

(67) These units were sold to Pacific Fruit Express: 1020, renumbered PFE 1020 (6/64), retired 3/68; 1023, renumbered PFE 1023 (2/66); 1209, renumbered PFE 1209 (3/68).

(68) 5353 was renumbered 5339 (2nd) (1961).

# TRACKSIDE IN THE DIESEL AGE, by Jim Edmondston

DO YOU know the difference between an F-7 and a U-25b? Do you care? If so, this page is for you. Steam was my first love; it is now little more than a memory. Tourist roads and operating museums are great, but cannot take the place of mainline steam.

So I came over to diesels. Slowly, at first. At length I acquired favorite units, such as the handsome Alco FA-2 and the brutish F-M Trainmaster. After I had mourned the loss of the Washington Terminal's last C-1 0-8-0, I discovered that WT's entire roster was now made up of equally-ancient Alco RS-1 road switchers. B&O, my home road, laid aside its Mikes and Pacifics and added new GP-7's, the first I'd seen. The diesel world was dawning for me and I've since found it quite interesting.

Today's alert railfan may spot these older units working in conjunction with today's high-powered "second-generation" diesels. When I was starting to notice, in the early 1950's, there were three major diesel loco builders and two secondary ones. EMD, Baldwin, and Alco-GE shared the huge market, with smaller firms like Lima and Fairbanks-Morse trying to get a slice of the pie. The many models and variations they produced made some roads ideal for diesel photographers.

Many roads still operate a "mixed bag," notably the Western Maryland, B&O, Penn Central, L&N, Santa Fe, and Southern Pacific. Others are more or less standardized on one builder, some even one or two models. By knowing your railroads and their power, you can easily visualize, say, a Northern Pacific Alco S-2 switcher working in Seattle, although you may be watching Alco S-2 No. 66 working for RF&P in Potomac Yard, Va. In steam days, that was difficult: RF&P 0-8-0's, for instance, were quite unlike NP 0-8-0's.

Remember how steam sounded at work? Powerful. Have you ever really listened to today's diesels at work? If so, you likely can tell which type of unit is sounding off. EMD F-units and Geeps have a strong, rythmic chant. Alco units, primarily the older road switchers and FA's, have a burbling whistle, and when idling they sound like they are about to expire.

Baldwins had a sound all their own, a deep syncopated rumbling, no doubt due to the inherent ancestry of their marine-type De La Vergne engines. The opposed-piston F-M engine gave off an evenly-spaced beat, and usually clouds of white smoke when cold. The beat deepened into a mighty growl when loaded. GE units, for the most part, sounded like their Alco half-brothers. The chant of the "second-generation" units of today is muffled by the whine of their turbo-chargers. Some units of today sound like small jet planes.

Airhorns have changed, too. From the early bullhorn of most first-generation units, we have progressed through the Nathan Air Chime and higher-pitched horns to a compressed-air whistle, which almost sounds like some steam engines.

The railroad activity in Cincinnati, my home town, is tremendous. It keeps the average fellow on his toes to stay informed. The other day, while driving home from work, I was just about to cross under a B&O bridge when I pulled over to watch a drag freight pass. Heading it up were two units: SP No. 9108, an SD-45, and an SP GP-35. I was astounded. Later I found that a pool arrangement between B&O and SP-SLSW was responsible for the western units in Cincinnati. Expanding on this, we have since had DL-600, GP-20, and SD-40 units in here, lettered for SP and Cotton Belt.

Both L&N and PC have leased SP units. L&N uses a batch of Alco C-628's out of DeCoursey Yard, across the Ohio River in Kentucky, and PC got some C-630's for use out of Sharon Yard. L&N operates a stable of varied power in DeCoursey. This is the strategic yard where the two legs of L&N meet, the Cincinnati-Louisville and the Cincinnati-Corbin lines forming a Y at Latonia, Ky. Four-axle power, normally GP-30, 35, and 40 plus U-25 and 28-b units are used to Louisville on high-class freight runs, while the Corbin line, being a coal conveyor belt, uses six-axles and gets SD's, C-628's and 630's, and U-25 and 28 c's.

L&N has a habit of just operating the power it gets through merger or sale from another carrier, with little change in paint scheme. C&EI units often turn up in DeCoursey. The Alco power bought in 1963 from Rutland was operated in Rut colors but lettered L&N. The same went for those units bought from L&NE. The Rutlands and the LNEs are gone.

The Southern uses high-nosed SD-35's and SD-45's on prodigious freights. A morning train, No. 151, called the "Sparkplug" because of its preponderance of automobile parts, is often dispatched with over 200 cars. In 1967, when slave units were being tried, SD-35's and SD-24's moved the train. One day in Cincinnati I counted 232 cars. Southern often operates engines with strange names, although all in the family. I've seen Central of Georgia and Savannah & Atlanta power in Gest Street Yard. Today, Southern has new SW-1500 switchers in town, one of which, the 2336, is sub-lettered CTC, for Chattanooga Traction Co.

Add to these the N&W, with its many GP-9's and SD-40's, the C&O, operator (in conjunction with B&O) of the only regularly-used Baldwin power in town, and the only EMD cow-calf switchers, plus the daily visits of DT&I and Ann Arbor power on DC-9 out of Sharon Yard, and it comes to a lot of diesel-watching. Besides, you knever know what will turn up on PC—units from BAR, NP, B&LE, SP, and now, even F-7s' off D&RGW. Who says diesel-watching isn't interesting?

Drop me a note on what you've seen. There are still many missing links in the diesel story. Some may be found in obscure locations, such as industries and shortlines, hidden away from most fans. With help, these can be brought to light. Look also for interesting variations on standard models. Check obvious things like trucks, cabs and pilots, as well as odd louvres, filters, added appliances. Also send me news of older units, rare models, etc., anywhere in North America.

If you see a unit you don't recognize, tell me the road name and number, enclose a self-addressed stamped envelope, and I'll identify it. Don Dover, publisher of *Xtra 2200 South*, a diesel newsletter, helps me. His huge files supply info.

I am not in the *Railroad Magazine* office. Write to my home, 792 Farnham Court, Cincinnati, Ohio 45240. But please don't send diesel pix for publication. The editor already has on hand enough engine, train, and trolley photos to fill the magazine for the next two or three years.

**New Haven roundhouse employe sands an Alco RS-2, No. 557, at Danbury, Conn.**

Howard Pincus, 5 Eldredge Pl., Rye, N.Y.

# INFORMATION BOOTH

**ASK BARBARA:** Railroad questions are answered here—as many as space permits. Address Miss Barbara Kreimer, *Railroad Magazine*, 205 East 42nd Street, New York, N. Y. 10017. No questions will be answered by mail or telephone.

**1 *What is B-B wheel arrangement?***

B-B wheel arrangement means that two trucks are connected to the locomotive body, each truck having two axles, both driven by traction motors—8 wheels in all. C-C wheel arrangement also has two trucks connected to the body, but in this type, each truck has three axles, all powered. Such designations apply to electrics and diesels.

**2 *Can you tell me something about the PRR's* Congressional?**

Yes. The train first started service in Dec. 1885. In those days it covered the 225-mile New York-Washington stretch in about 5½ hours. This was when passengers were ferried across the Hudson River between New York and Jersey City. After electrification to Washington, completed in 1935, the trip took 3 hours, 55 minutes. In the 1930's and 1940's the *Congressional* undoubtedly carried more famous personages than any other American name train. For a long time it used only parlor cars.

**3 *How did an inspirator differ from an injector in the operation of putting feedwater into the boiler?***

MoPac engineer Eakles A. Hille of Little Rock, Ark., replies: "Injectors lift and discharge water to the combining tube at atmospheric pressure or less. Thus, the temperature of the water delivered to the boiler, with the injector working at capacity, cannot exceed 212 degrees F. If it is desired to deliver water at a higher temperature, the injector must be of the double-jet type. This is the principle behind the Hancock inspirator.

"The term originated from the fact that, in 1868, John T. Hancock made some improvements in an apparatus used to draw in air. He used the word 'inspirator' to suggest a drawing in, or inhaling. The name was retained for the later water devices.

"In operation, water enters the body of the inspirator through the lifting tube and out the overflow valve and overflow pipe. As soon as it is primed, the second, or forcer, valve is opened, admitting a jet stream to enter the forcer tube where it picks up the water from the lifter tube and carries it into the delievery pipe. The overflow valve is then closed."

**4 *What is the total number of diesel locos in the U.S.?***

According to the most recent A.A.R. estimate, there were 26,850 at the end of 1969. This is down slightly from 27,045 in 1968; in 1960, there were 28,238. Despite the drop, 1,100 new locos went into service in 1969 compared to 1,055 the year before. Presumably, more equipment was scrapped, which accounts for the lower '69 figure. (Most new diesels have more power per unit than the ones they replace.)

**5 *Which industries does the New Jersey, Indiana & Illinois Railroad serve?***

The NJI&I serves 25 industries on its 11½-mile route from South Bend to Pine, Ind. Among them are Allied Products Corp., Armco Steel Corp. (Metal Products Div.), Bendix Corp., and Sears, Roebuck & Co. Now part of the Norfolk & Western system, the NJI&I owns 898 cars.

**6 *Why did the Pennsy* Aerotrain *fail?***

Poor suspension was the principal reason. The *Aerotrain* was extremely light—each GM-built car weighed about 32 tons compared to 65 tons for a conventional car. Service first started in 1956 between New York City and Pittsburgh.

**7 *When did the Louisville & Nashville run its last steam locomotive?***

The L&N became fully dieselized in Nov., 1956. The last "official" run of a steam engine took place Jan. 28, 1957, from Worthville to DeCoursey, Ky., using No. 1882, a Mikado built by Brooks. L&N had leased her to the Carrollton RR.

**8 *Who was "Mile-a-Minute" Murphy?***

Charles M. Murphy earned his monicker by the feat of making a mile in 57.8 seconds on a bicycle behind a speeding Long Island train.

It took Murphy months to persuade the LIRR to run the train, but eventually it did, on June 30, 1899. Specially planed planks had been laid between the rails from Maywood to Babylon and No. 74, an eight-wheeler, was called into action. Samuel Booth, presumably the road's best engineer, piloted the "Murphy Special." At the end of a passenger coach, a streamlined hood was built to cut off wind resistance. At 5:10 p.m. the race began.

Murphy was left behind several feet as the train pulled off, but he quickly caught up. At one point, his bicycle hit the rubber bumper at the end of the coach; this meant he was actually going faster than the train! The most dangerous moment came when Sam Booth shut off steam at the end of the mile mark. No. 74 slowed suddenly and Murphy crashed into the train's end but a strong-armed spectator pulled him to safety. Murphy suffered no side effects other than a few bruises from pieces of flying ballast and general exhaustion. Later, he joined the New York City police force and organized the city's first motorcycle squad.

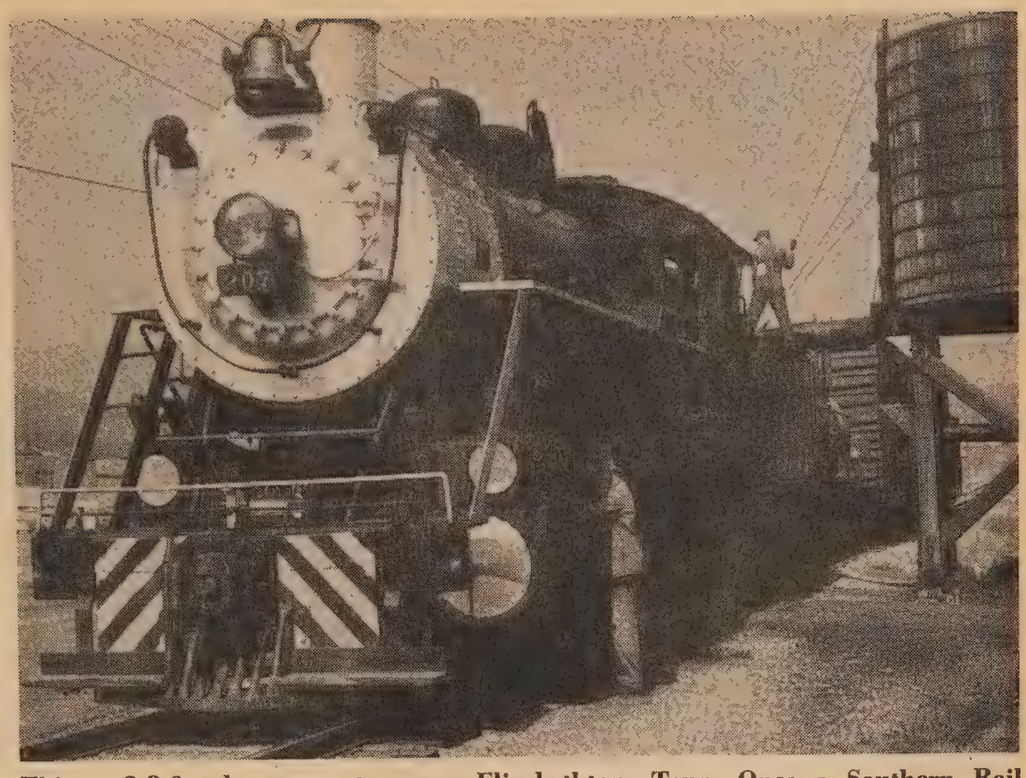
**9 *Would you print an Ogden Nash poem,* The Winged Ones?**

Yes. It appeared in 1952 in the *New Yorker* magazine.

**I don't travel on planes.**
**I travel on trains.**
**Once in a while, on trains,**
**I see people who travel on planes.**
**Every once in a while, I'm surrounded**

**"Mile-a-Minute" Murphy on a trial run**

y people whose planes have been
grounded.
m enthralled by their air-minded
snobbery,
heir exclusive hobnobbery,
nd I'll swear to, before any notary,
he clichés of their coterie.
hey feel that they have to explain
ow they happen to be on a train,
or even in Drawing Room A
hey seem to feel *déclassé*.
o they sit with portentous faces,
nd clutch their attaché cases.
s the Scotches they rapidly drain
hat they couldn't have got on the
plane,
hey grumble and fume about how
hey'd have been in Miami by now.
hey frowningly glance at their watches
nd order more Scotches.
y the time they're passing through
Rahway,
hey should be in Havana or Norway,
nd they strongly imply that perhaps,
ince they're late, the world will
collapse.
hen, as station merges with station,
hey complain of the noise and
vibration.
hese outcasts of aviation,
hey complain of the noise and
vibration.
ometimes, on the train, I'm sur-
rounded
y people whose planes have been
grounded.
hat's the only trouble with trains:
Vhen it fogs, when it smogs, when
it rains,
ou get people from planes.



**Thirsty 2-8-0 takes on water near Elizabethton, Tenn. Once a Southern Railway steamer, she now belongs to the East Tennessee & Western North Carolina.**
Ron McGhee, 570 McMurray Dr., Nashville, Tenn. 37211

## Running Extra

"Who knows the numbers of the two Pennsy engines and passenger cars involved in the Feb. 18, 1947, derailment of the *Red Arrow* near Altoona, Pa.? I have two large pictures of the wreck, but no numbers on the equipment."—Roy L. Brath, 1319 W. May Ave., Wichita, Kan. 67213.

Preparing a history of the New Jersey & New York RR. is Wilson Jones, 105 Fairmount Ave., Hackensack, N.J. 07601. He needs old photos, tickets, timetables, etc.

Joseph Rumsey, Box 3, East Rutherford, N.J. 07073, wants pix or info. on the Olean, Oswayo & Eastern, later the New York & Pennsylvania. Jim says his grandfather, J.B. Rumsey founded the OO&E.

"Did the Southern Pacific ever sell any steam engines to the Southern Railway?"—Dale Miller, 2515 S.W. Plum Court, Portland, Ore. 97219.

"How many 3600, 2800, and 2500 series diesels did the Northern Pacific own and operate just prior to the BN merger?"—Bill Kuebler, 408 Egbert Court, Fargo, N.D. 58102.

Answering George Pierson's item (April '70) is Kenneth W. Willis, 716 S.W. 16th Ave., Gainesville, Fla. 32601, who says that no narrow-gage line served Hill City or Keystone, S.D. "Keystone was reached by a standard-gage spur from Hill City in 1900. CB&Q did serve Deadwood, however, over dual-gage tracks, as did the Chicago & North Western."

"I am building a 5-inch-gage model steam loco similar to the Pennsy K4. I wish to make a chime whistle for it with notes of the right pitch. Does anyone know the proper notes by letter or frequency?"—Noel Kay, 18, Montpelier Rd., West Malvern, Worcs., England.

Pix or drawings of Lake Shore & Michigan Southern freight cars of the 1870's are wanted by Forrest Simmons, 320 E. Madison St., Goshen, Ind. 46526.

An ex-L&N machinist, Arthur Lawrence, 1638 Jaeger Ave., Louisville Ky. 40205, sent us a photo of a tombstone in the Eastern Cemetery in Louisville which has Illinois Central loco No. 202, a 4-6-0, carved on it, with the words: "He died that others might live." What were the circumstances of his death?

"Where in Germany was the movie *Von Ryan's Express* filmed; what train was used in it? How many miles of track has the German Federal Railways? How many tunnels? Also, how many steam locos still roam the rails in West Germany?"—Arnold C. Jensen, 732 Clifford Ave., Rochester, N.Y. 14621.

"I'd like a short history of the old 'Three-I-line', the Indiana, Illinois & Iowa. How is it doing as the Kankakee Belt Line?"—John Petit, 247 N. Prairie Ave., Bradley, Ill. 60915.

Correction to our March '70 issue comes from Ralph A. Marson, Centerline, Mich., who says the Kankakee & Seneca was a abandoned in 1935.

"I own an old Norfolk & Western engine bell. Years ago, a railroad man said it was hand-made out of a special alloy which gave it a tone superior to that of machine-made brass bells. Can anyone supply more data or tell me how I could sell it?"—Chester Arnold, Cone Mills Corp., Greensboro, N.C.

"Is it true that the last new 0-8-0 Camelbacks, class I-3, and the last new 2-8-0 Camelbacks were built by Baldwin for the Lehigh & New England in 1927? I imagine both orders were sent in at the same time."—Warren D. Stowman, 7013 Hegerman St., Philadelphia, Pa. 19135.

"I am looking for photos of engines, bridges, and general railroadiana of the BC&A, B&E, DM&V, M&DC, and PRR for an exhibit I am preparing of Delmarva Peninsula railroads."—William V. Russell, 402 Rochelle Ave., Wilmington, Del. 19804.

"I need photos and slides of American steam locos built after 1930, the bigger the better. Are color posters of steamers or diesels available? I would trade photos, slides, etc., of English locos.—P.J. Bartlett, 37 Norland Square, London, W. 11, England.

# PASSENGER TRAIN SURVEY

IF PENN CENTRAL'S petition to drop all 48 of its east-west passenger trains is granted, the most densely-populated quarter of the nation will have no direct intercity rail service. The discontinuance would include such great name-trains as the New York-Chicago *Broadway Limited*, one of the most famous runs of all time, the New York-St. Louis *Spirit of St. Louis* and the Cincinnati-Chicago *James Whitcomb Riley*. The ICC held hearings in April and May in areas served by those trains. A decision should come any day now.

Penn Central's petition is, of course, being fought by the National Association of Railroad Passengers, a non-profit organization based in Washington, D.C. (417 New Jersey Ave., S.E.), which has members in all 50 states and overseas. Anthony Haswell, the NARP chairman, puts it this way:

"Discontinuance of these trains would wipe out or seriously dislocate intercity service for an area with a total population of more than 50 million. One of the worst aspects of PC's proposal is that it would remove the basis upon which a workable national rail network could be built to relieve the critical congestion on our highways and in the air. The abandonment would adversely affect western carriers by eliminating rail connections with the East.

"The success of Penn Central's own *Metroliner* in the Northeast Corridor is proof that people will use the trains if there is good, reasonably fast service. Over 700,000 passengers, many of them former air travelers, rode these trains in their first year of operation. It is to be hoped that similar service can be instituted in other corridors around the country."

The *Metroliners* make the trip in as little as 2½ hours nonstop, or 2 hours 59 minutes with stops at Newark, Trenton, Philadelphia, Wilmington and Baltimore. The fastest regular train makes the run in 3 hours 40 minutes.

With clean, modern interiors, upholstered seats, snack bars, and at-your-seat meals in parlor cars, the *Metroliner* is regarded as the first modern American train with the speed and comforts to rival jetliners.

According to Penn Central, the *Metroliner* appears to be making a profit, although company spokesmen point out that accounting procedures make it difficult to separate it from other operations.

**Pennsy passenger discontinuance policies continue under Penn Central manag ment. Here, Peggy, Diane, Mike, and John Woodcock symbolically wave goodb to a GG1. Photo was taken by vice president of the Wawa & Concordville Rl**

(c) Brian R. Woodcock, 203 Molly Lane, Chadds Ford, Pa. 193

**Scenes like this seem almost rare these days with dirty coaches more commonplace than ever. Road is the C&O-B&O.**

"Thousands of us do not like to fly," writes Mrs. Howard Holman, 2610 S.E. Hawthorne Blvd., Portland, Ore. "Are we to be forced to it? Apparently the management of Southern Pacific has definitely decided that they are through serving the public as far as passenger trains are concerned.

"My husband and I recently returned from a trip to San Francisco on the *Cascade*. We enjoyed the luxury of a double bedroom suite, an excellent porter, accommodating personnel throughout.

"Our Pullman car was so old that the porter could hardly manage to set up a table in our double bedroom. was probably as clean as such o equipment could be, but it left muc to be desired. There was no diner, on a coffee shop, and the dining stewar was embarrassed to serve a $7 stea on a paper mat! He said so!

"Our train added four cars at Klam ath Falls which were the epitome luxury. Two beautiful Pullmans, gleaming diner with glistening whi table cloths and silver, hovering wai ers plus a lovely lounge car. That wa the way the *Cascade* used to be!"

The Milwaukee Road says it intenc to discontinue its *Pioneer Limite* which for decades afforded luxury ove night service between Chicago, Mi waukee, St. Paul, and Minneapolis.

J. Stewart Warden has been appoin ed by Charles E. Bertrand, president c the Reading Co., as assistant vice pre ident-passenger services—a post newl created to show the importance wit which Reading management holds tha service.

Although most American railroad for a generation have been doin everything possible to drive away pas sengers, comments the *U.S. Catholi*

gazine, American railroads carried million passengers during 1969 com- ed to 140 million passengers carried commercial airlines. The airlines, of irse, do everything to encourage sengers, making the placing of res- ations a joy, serving delicious meals hout charge, maintaining thousands flights daily and thanking their pas- gers profusely.

Despite an almost total lack of com- ition between the airlines and the droads, 75 percent of the American ople have never set foot in an air- ne. The highways, of course, move more travelers than the other two rriers combined. But the fact that influential minority—legislators, inion makers, executives—depend on airlines probably accounts for the t that vast subsidies are available airports and air transportation while railroads receive little or no subsidy.

If we follow our familiar feast-or-famine approach to the solution of crises, it won't be long before legislators will be calling for "a multi-million-dollar crash program" to save the railroads from extinction. It can't be very long, what with the multiplication of highways turning the nation into a giant parking lot and with new airports to relieve the congested existing air fields being planned 75 and 100 miles outside of the cities they're intended to serve.

In Canada, doubts on the adequacy of local hearings on applications to abandon railway passenger services have been expressed by D. V. McDuffe, assistant Canadian legislative representative, United Transportation Union.

In a letter to the Commons Transport and Communications Committee, he said that at such hearings "the only issues to be debated will be the impact on the communities involved."

While not minimizing their importance or the necessity for holding local hearings, he pointed out that there remains "a tremendous amount of research to be done before anyone can say with any degree of certainty where we should be going, how soon and how far in the field of public transportation in Canada.

"But already," he added, "we are entertaining applications to abandon—by Canadian Pacific, all of its passenger services, and by Canadian National, one-fifth of its services—based solely on local or regional hearings. And we have no doubt the railways are preparing many more."

William N. Clark, 4112 Hillbrook Dr., Louisville, Ky. 40220

**"E" unit pauses for servicing in Louisville Union Station at the head end of the southbound *South Wind*, on this trip consisting of 13 cars. Still in service, train carries passnegers between Louisville and Miami over L&N and SCL tracks.**

STEVE MAGUIRE'S

# TRANSIT TOPICS

RETURNING from a trip to Mexico and South America, Ralph Forty, 542 Beech St., Apt. 307, San Diego, Calif. 92101, tells us of transit lines he visited including one unique trolley museum line.

In Mexico City, the Servicos Tranias Electricos operates ten streetcar lines, a couple of which have small connecting tracks to reach Metro subway stations. The lines have been made into one through service that runs from Xochimilco to the Huipuico circle, then out to Tlalpan.

In Rio de Janeiro, both of the Carioca meter-gage lines are now operated by the Guanabara State Transport Authority (CTGGB). They start near Praca Carioca and run over the famous Arcos viaduct, diverging at Largo do Gumaraes with the Dios Irmaos route which operates on a 12-minute headway using three cars on double tracks. Mr. Forty did not mention the last remnant of the Rio trolley system which, we understand, may still operate cars on the suburban Santa Theresa line.

At Santos, Brazil, there are six routes still running, all using closed cars (apparently, open cars are no longer in service). This system is expected to be closed by 1972 due to lack of parts.

The lines at Porto Alegre and Piracicaba are both recent abandonments. However, cars are being kept pending possible sale to trolley museums. Piracicaba has five-meter gage opens and one trailer, while Porto Alegre has 86 closed standard-gage cars, many from the U.S. (see July '70 issue).

Paraguay's only trolley system, at Asuncion, still operates two lines using 10 trams. Six are former Buenos Aires cars and four are English-built, all single truckers. These lines are kept operating under orders from the *Jefe*, President Stroessner. Cars do not run during the noon-time siesta or after 1 p.m. Saturdays, Sundays and Holidays.

The interurban system in Buenos Aires was formerly the General Urquiza RR. Now, it is government-owned and newly painted equipment bears the lettering *Ferrocarrilles Argentinas*. All the Pacific Electric Ry. PCC cars have been scrapped with only three trains of the older center door PE cars remaining. Service is still given, though, by the even older PE 1100 series cars made up into 4 and 5 car permanently coupled trains. There are also two former PE freight motors that switch freight. These are occasionally pulled by steam locomotives over the third rail portion to yards where the overhead is strung up. Their use may be due to the power pull of the locomotives over the third rail, Mr. Forty says.

Biggest surprise in Mr. Forty's letter is the operation of a trolley along Montevideo, Uruguay, streets more than ten years after the city system was abandoned. City car No. 595 runs down a single track on Carlos Gardel and Isla de Flores Avenues each Saturday and Sunday afternoon, under the sponsorship of a local museum group which was also active in saving five of the city's trolleys. At present, the car runs for a distance of 8 blocks, but plans call for extending the line to 4½ miles. To do this, it will be necessary to remove the light asphalt that now covers the rails. Overhead wires will also have to be reinstalled, but this will be done by the city's transport people. The plan has won city approval.

This is the first time I know of that any museum has been allowed to operate in a public street.

**To save time, send *Transit Topics* mail directly to Stephen D. Maguire, P.O. Box 51, Belmar, N.J. 07719.**

**Niagara, St. Catherine's & Toronto Ry. line car is seen at Thorold, Ontario**
Photograph by Elmer Treloar

BOARDING cable cars on the turntables in San Francisco is now prohibited. For many years, it had been a custom for riders to help push cars around turntables at the end of the Powell cable line at Market Street. Lately, though, more and more oddballs have been boarding cars while they are still turning, thus risking life and limb. So, writes Charles Tidwell, Box 16399, San Francisco 94101, the city has given cable car operators strict orders not to let anyone board cars while they are being turned.

Herb Caen, in his S.F. *Chronicle* column, asked readers about the origin of "86" as the bartenders' code for "Throw da bum out." Art Miller, Antioch, Calif., replied: "The true beginning, as handed down by my father, was that in Chicago, when a person got drunk, the bartender would place him on a passing streetcar; the end of the line was 86th Street, at which point the victim was supposed to be sober again.'"

Can any reader confirm this?

PEAK-HOUR capacity of the Port Authority Trans-Hudson (PATH) system will be increased next year by using longer trains on the runs to and from lower Manhattan. This will be done by buying 46 new air-conditioned cars costing $9.46 million, says James Kellogg, Port of New York Authority chairman.

PATH trains are now six cars, but with the longer platforms being built in the World Trade Center Terminal in Manhattan, they will be increased to eight cars coming from Newark and seven coming from Hoboken. When the Journal Square Transportation Center in Jersey City is finished, ten-car trains will be possible. The present 90-second headway during rush-hours will remain

**Monorail transportation has many shortcomings in heavily traveled, mass-transit situations, but for short distances and light traffic, monorails are popular and convenient. Universal Design, Ltd., a Westinghouse Air Brake subsidiary, is currently testing systems, such as the one pictured above, which could be used effectively in airports, ski areas, and camp grounds.**

Kellogg says, because no additional trains can be scheduled through the system's underwater tunnel sections.

The new cars, due in service in late 1971, will bring PATH's air-conditioned fleet to 298 cars. Since 1967, when Erie Lackawanna abandoned its trans-Hudson ferry service, PATH daily traffic has increased from 97,000 passengers to 140,000.

INDUSTRIAL electric line of the Pacific Coast Aggregates cement plant at Davenport, Calif., closed down in March, according to *The Western Railroader* (magazine), Box 668, San Mateo, Calif. 94401. This narrow-gage mine-type line had over 3 miles of trolley wire between the quarry and the crusher. A passenger car rebuilt from a Pacific Coast Ry. trolley hauled workers on the right-of-way between these two points.

AT LEAST one trolley museum is open all winter long, reports Robert H. Flack, 1909 Forest Dale Drive, Silver Spring, Md. It is the National Capital Trolley Museum, which just started operating last October in Northwest Branch Regional Park, Montgomery County, Md. Instead of closing shop, due to cold weather and snow, the hardy new group operates its line both Saturdays and Sundays. Their efforts in the first four months brought 24,000 riders—quite amazing, considering the weather. Several times, ex-Washington, D.C. snow-sweeper No. 07 was used to clear the half-mile route.

The line's summer schedule is from noon to dusk, daily except Tuesdays, until Labor Day. Its track will soon be extended to one mile. A photo of the museum barn and cars which appeared in our April issue was made by Ara Mesrobian.

MUNICIPALLY-OWNED trolley freight line at East Troy, Wis., obtained its first diesel in March, says Jay Lentzner, Box 450, Rte. 1, East Troy, Wis. 53120, following the construction of a mile of new track to serve the Trent Tube plant in East Troy. Officials considered it too expensive to electrify the track for the line's two electric motors. Originally, the East Troy route was part of the Milwaukee Electric Railway & Light interurban system. When the line into Milwaukee was abandoned 30 years ago, the city, to keep rail connections into East Troy, bought the seven-mile segment from East Troy to Mukwonago. It also bought the two motors, freight motor M15 and Differential D13. Since then, these electrics have been used to haul freight. Now, the new diesel will take over part of the work.

DISCOVERY of ancient ruins has turned out to be a commonplace occurrence for subway builders in Rome, Italy. When excavators for the city's new underground line started digging at the Piazza della Republica, a projected stop on the system, they ran into the buried remains of the entrance to Rome's biggest public baths, built by Emperor Diocletian in 298 A.D. Trying a second time, they reached another part of the baths. Finally, a third test shaft located a ruin-free site off to one side of the square. Ever since that experience, Rome subway builders keep their fingers crossed when digging. The new line is expected to be finished in 1973, ruins permitting. It will run from the railway station to the Cinecittà film center in the country. The first line was completed in 1955.

BRITAIN's Crich Tramway Museum has bought the last of the former Third Avenue Railway System cars that ran in Vienna, Austria, from 1949 to '69. The last of these Viennese cars, ex-TARS No. 674 (Vienna No. 4225), was transported from Hamburg on the ferryboat *Lynn* and arrived in London on April 16th. It is a welcome addition to the museum's fine collection of British and foreign trolleys. (Pic, page 40.)

England's Electric Railway Society publishes a bi-monthly, the *Journal*, featuring historical, technical, and general news items of electric systems worldwide. It also sells many slides—some on the Brill interurbans still used

in Barcelona, Spain. Memberships cost only $1.80 a year. Contact Dr. I. Frew, 96 Antrobus Road, Sutton Coldfield, Warwickshire, England.

BATTERY FAILURES of cars on the St. Joseph Valley line (March issue) brought a response from Felix E. Reifschneider, Box 88, Fairton, N.J., who sent us a list of battery car failures on the Long Island Railroad over a two-year period 50 years ago. Not one was recorded as being due to the batteries themselves.

Regarding the dispute between the Valley line and the Edison-Beach Co., Felix says that E-B should have had "sense enough not to guarantee 150 miles per charge without specifying the conditions, such as loading, schedule speed, etc. The biggest variable in energy consumption is the method of operation. If I had been the Edison people, I would have sent someone out to instruct motormen in proper methods, including coasting and other ways of saving energy. To reduce costs further, E-B could have geared the motors for lower top speed, or added cells to the battery as they did to the battery cars in Cuba.

"Mr. Bucklin, president of the road, should have given the battery a boost at Angola which might have been all that was needed for the car to complete its trips. The car should also have been equipped with a trolley pole for use when operating under the wire between Bristol and Elkhart. Battery cars have rarely gone 'dead' on the road except in cases of mechanical or electrical trouble."

CONSTRUCTION of a fine new $100,000 Chicago South Shore & South Bend passenger station at South Bend, Ind., should be completed by the time you read these pages. The one-story, concrete block building, is located at Meade and Washington streets. Arrangements have been made with the South Bend Public Transportation Corp. to provide bus service every half-hour from downtown to the station. The old depot, in use since 1914, is being sold to finance the project. Just what effect the new station, two miles from downtown, will have on the already diminishing passenger service of CSS&SB is yet to be seen.

**Vienna trolley No. 4225 (ex-TARS No. 674) comes ashore after trip from Hamburg.**
J. H. Price, 48 Highlands Court, Highland Rd., London, S.E. 19, England

## New Electric Publications

***Blue Ridge Trolley: the Hagerstown & Frederick Railway,*** **by Herbert H. Harwood, Jr., 144 pages, 8½x11″, hard cover, costs $8.95 from Golden West Books, Box 8136, San Marino, Calif. 91108. The H&F was a country trolley line whose city and suburban routes rambled in several directions in the Blue Ridge range of north-central Maryland. This electric line was remarkable in that it lasted through the Depression, World War II, and into the fifties. The author traces its history from the earliest companies in 1896 to dieselization in 1955 and sale of its last trackage in 1961. As with most Golden West publications, photographic reproduction of scenic views is excellent.**

**Readers should not confuse this book with a second edition of *Rails to the Blue Ridge*, history of the Washington & Old Dominion, also written by Mr. Harwood. This 114-page book costs $4.50 from Pioneer America Society, 626 S. Washington St., Falls Church, Va. 22046.**

***Where Travel Means the Trolley: A Guidebook to Orange Empire Trolley Museum,*** **by Mac Sebree and Jim Walker, 64 pages, costs $2 from O.E.T.M., Box 548, Perris, Calif 92370. (California residents add 10¢ sales tax). This describes the trolley museum line at Perris, with many views of equipment; also a roster.**

**Reprints of *Brill's Magazine*, a trade journal published by the J.G. Brill Car Co. from 1907 to 1927, are being offered on an annual subscription basis by Harold E. Cox, 80 Virigina Ter., Forty Fort, Pa. 18704, at $12 for each reprinted volume of 12 issues. The 1907 reprinted issues will probably be completed by the year's end. Original issues are collectors' items.**

***The Gyro Monorail,*** **by E. J. Quinby, 28 pages, 8x11″, soft cover, is a technical treatise on the gyroscope and its application in stabilizing trains at high speeds. A history of the gyro's past uses is given, with photos and drawings. We understand that several of the high-speed Northeast Corridor officials have expressed interest in the application of Commander Quinby's project. Copies from E. J. Quinby, 30 Blackburn Rd., Summit, N.J., are $2 each.**

Earl A. Yorke, 27257 Currier, Dearborn Heights, Mich. 48125
**Engineer looks at conductor closing switch on Illinois Terminal track between Randolph and Bloomington, Ill., in 1949.**

# ONY'S TIN GOD by Gilbert Lathrop

)NY SPINOZZI liked to squeeze his stocky, muscled body tight nst a red sandstone cliff in Ruby yon and thrill to the pulse of driv- wheels and the earth tremors of nky Pullmans while a thundering enger train passed by with "Sky- et Bill" Sullivan at the throttle of coalburning engine.

kyrocket Bill was the section fore- 's ideal. For fifteen years, ever e Tony, still wearing the homespun is native Albania, had gone to work the "Racetrack" Division as a sec- hand, he had almost worshiped the d-faced runner who blued the air nis cabs with profanity. During all time Tony had harbored the wish some day Meester Sullivan would te him into the cab of his engine and im ride.

ony was laboriously writing a letter nis brother-in-law back in Albania. My Dear Benito," he began. "It is en years since I landed in America. s is the land of opportunity. I have anced from a common railroad sec- hand to a foreman with a section ny own.

One of my best friends over here big engineer. He is called Skyrocket Sullivan because of the way his en- e stack erupts red cinders. It is like uvius when she is angry. He calls —"

Here Tony hesitated, because he was est. No use to mention the names ester Sullivan called him most of the e. His brother-in-law wouldn't un- stand.

Yesterday I offered him a cigar," ny wrote on. It is true that the king pe had offered Meester Sullivan a ar. The occasion was a broken rail. ile Tony's ten sweating men were cing it, he had climbed into the deck the 428, a wheezing Mikado ten usand miles beyond the mileage re- red for a general overhauling.

Skyrocket Bill didn't see the dumb ration in the eyes of Tony Spinozzi the little man waddled across the k, his mouth warped in his widest le. Today, Tony intended to realize dream of many years. He would e a nice fat cigar to his idol, Meester livan.

To Skyrocket Bill, however, Tony s just another "domned furriner," te beneath a hogger's notice.

Meester Sullivan," began Tony, "not for long will you be delayed. Perhaps the delay will be more easy if you smoka thees cigar."

Tony drew out a foil-wrapped weed with a flourish and extended it. Bill frowned. Instead of accepting the proffered smoke, Bill leaned forward, placed elbows on knees, and growled: "Quite a sizable fambly yuh got, ain't it?"

From across the cab his fireman, Rube Parmain, watched the play.

Tony visibly swelled with importance as he replied: "Thirteen, Meester Sullivan. Seven boy, siza gals, and my good wife, Christine."

"I reckoned as much," the hogger said sourly. "Which is a good reason why yuh shouldn't be passin' out cigars to them as can afford to buy their own. Spend your money on them childer and don't insult men by offerin' us cigars!"

Then, seeing the look of pain which crossed the swarthy face and not wanting to display any softening of the heart, Bill shouted: "An' bein' up here in th' cab instead of on th' ground where you belong ain't gonna get you nowhere, either! Ridin' over your section is like goin' over ties widout rails on 'em. Shameful disgrace, th' way ye let th' track go to hell!"

Tony evaporated from the cab. Afterward, his voice and his accompanying gestures as he directed his gang lacked their usual fire and snap.

TONY needn't have worried over Bill's fault-finding. For the master mechanic himself and on down through the roundhouse foreman, the cinder pit flunky—even the roadmaster—all had felt the hogger's stinging criticism. Only the fact that Skyrocket Bill was an artist in the cab had kept him piloting trains over the Racetrack some thirty-odd years.

At Milepost 446 stood a short old wooden bridge. The main line dropped on a two percent grade west over a bad piece of adobe hillside. There was nothing wrong with the bridge, but the track due east of it began to heave badly.

Bill felt it the first time he hit it going about fifty miles per hour, and when the Mike was over he looked back to find he could read the end numbers on the boxcars as they staggered across. He was pulling freight then. So he began howling about the bad piece of track. He went to the roadmaster. Knowing Bill and his eccentricities, the roadmaster had a slow order issued. Bill had claimed that a speed of twenty miles an hour over the heaved track was fast. The roadmaster split the difference and set it at thirty-five.

Another hoghead, Jim Worthington, put his Mike and a string of fifty-eight loads over at thirty-five. Only they didn't get over. The wrecker spent the best part of two days untangling the mess. Nobody was injured. But inquiries began flying thick and fast from general offices.

Skyrocket Bill held the roadmaster's fate in the calloused palm of his hand and everybody figured he'd talk. But Bill was a gem carved with many facets. He kept his mouth shut, and nothing came of the wreck. On the surface, that is. The roadmaster, chastened in spirit, hunted up Skyrocket.

"I want to thank you, Mr. Sullivan." he began humbly, "for having protected my job. I'm grateful to you."

Bill spat thoughtfully. "Nobody was even scratched," he surmised, "which puts a different face on it. Kinda plant it back in your head, an' if iver I come askin' somethin' off yez, like a favor, remember it."

TONY'S section extended from Westwater east ten miles through Ruby Canyon. The section and bunk houses sat halfway between. They were painted a boxcar red, which only accented the molten heat of a summer day in that torrid gorge.

Tony had dug several choke-cherry bushes and planted them. In the spring their white delicate blossoms filled the motionless air with pungent aroma. He also had a flower garden in front, between house and track. Behind it was his vegetable garden, with tomatoes, peppers, garlic, and onions predominating.

The king snipe had made the best of his environment in this new, raw land. And the new, raw land was about to slap him down. Tony was quite unaware of it that summer day as he directed his gang toward putting in crossties. Everything was running smoothly. Four times during the past week Tony had waved a hpoeful highball to Meester Sullivan. Since the day of the broken rail he hadn't felt the sting of the engineer's lashing tongue.

Today, near quitting time, Meester Sullivan would come thundering down the canyon, his eyes focused on shimmering rails ahead, and twelve, fourteen, maybe sixteen humanity-laden Pullmans dragging at his tender. Beneath the beat of unleashed power the canyon walls would quiver and the right-of-way turn to jelly. And Tony would visibly swell as he doffed his gigantic hat and waved it toward his tin god.

But Dame Nature has ways of changing the ordinary course of events, and today she played a prank. It happened two miles down the canyon from where Tony and his gang worked. A steady breeze had blown at a thousand-foot level above the track, cutting away the accumulated dust and sand which bolstered a ton chunk of red sandstone. Abruptly the chunk tilted forward. With a groan like a stricken man, it tumbled end over end toward the main line below, crashed against eighty-pound rail, and shattered to fragments. But not before it broke the rail, leaving one end of the break several inches out of line.

Unaware of this, Tony surveyed the evidence of their day's labor at 3:55 p.m. and found it good. Reposing beneath the rails, tamped, spiked, an trimmed, was more than their quo of ties.

Perhaps it might be a good idea t set the motorcar on the rails and patr the track ahead of Meester Sullivan an his passenger train. This would insu a safe passage through the gorge f Tony's idol. And while the gang police up around the section- and bunk-house Tony could still greet his favorite run ner, the man he looked up to.

TONY was *put-putting* a little tc fast to make a stop when h rounded the curve and saw the litter c rubble and the broken rail. His ca struck it and took to the embankmen between track and sheer wall. Me tools, water keg, and lunch bucke were flung over the right-of-way.

Even as they picked themselves u rubbing at bruises, Tony started bar ing commands.

"You, Pedro, grab a red flag and ge back and stop Meester Sullivan! Te him we finda the broken rail. You Dominick, Jose, Angelo, Nick, get th motorcar out of the way. The rest c you start throwing off the rocks. Jump Meester Sullivan must not be delayed."

The ear Tony kept cocked up th canyon heard the mutter of distant ex hausts. He spurred his gang to renewe efforts while the exhausts grew louder Two impatient hoots from a deep-tone chime told him that Pedro had flagge Meester Sullivan. Exhausts grew silen and only the musical sound of rollin wheels, punctuated by opening safet valves, filled the chasm.

The Mike's blunt nose swaye around the curve, and air hissed as Bil halted. Tony hurried below the cab his right hand moving toward hi pocket where a foil-wrapped cigar wa carried in readiness. The cigar was hal out before a negative scowl on Bill' face caused it to be shoved back again. Tony rubbed the side of hi palm over his mustache. Then he grinned reassuringly.

"We finda th' broken rail, Meeste Sullivan," Tony had never presume to call his idol by a nickname. "But have it all fixed. Pull 'em up over i slow, lika the turtle. Later, we'll put in the whole new rail."

Bill grunted and curled his finger around the throttle. Tony ran forward took a last look at the spliced rail, and then confidentally signalled the en gineer ahead.

Drivers slipped, were caught on sand and the Mike surged against her soggy

**Men, tools, and water keg were dumped onto the right-of-way.**

in. Bill was in no hurry. He took
ny's word for the safety of the track.
ny felt sure it was safe. But his error
s in trying to hurry, in trying to not
ay his idol.

The unexpected often happens on
roads. Perhaps the flanges on the
omotive were worn sharp. Perhaps
ny was to blame for his rush to get
ester Sullivan and his string of var-
h moving again. It was probably a
nbination of both.

By the time Bill got them halted, the
ke's pilot was against the wall and
ry driving wheel was on the ground.
The conductor went after his porta-
telegraphone, to hook up and call
the wrecker. A hundred and fifty
s of engine don't hop off steel rails
l squat on wooden cross-ties with-
making a mess of things.

Skyrocket muttered angrily to him-
f. His mustache twitched and his eye-
ws stood above his eyes like little
ns. With a quick look around the
to make sure everything was shut
he slid down the hand-hold to the
und. Straight toward Tony he
de. When he spoke his words ex-
ded firecrackers.

'Accordin' to th' best of my recollec-
n, ye've been workin' on this rail-
d fifteen-odd years," he stormed.
ere ain't no excuse fer yez, an'
puttin' this derailment in just as it
pened. It's domned poor judgment
your part—about like any domned
riner would do in a emergency!"

Tony was speechless. His face paled
l his mustache lost its bristle. His
moved, but no sounds came. Tony's
god had crashed from its pedestal
l the little foreman was stricken with
reat hurt.

Bill clumped back to the cab,
nbed into it, and sat down to wait
the wrecker arrived.

TONY'S mind was working faster
than his body. Maybe when
ester Sullivan cooled down a bit he
uld reconsider. Surely the derailment
sn't all Tony's fault, as the hogger
imed. Tony had seen a dozen mis-
es worse than his covered up. En-
eers and conductors had means of
ing blunders when they felt like it.
The passenger train finally moved
vn the canyon, four hours and fifty
nutes late. Tony and his gang had
rked like dogs in getting the Mike
k on the rails and the track re-
red. The little foreman watched the
lights blink out around a curve.
en he *put-putted* toward home,
where Christine and the thirteen children waited, worrying over his delay.

It was a silent Tony who sat down to his garden vegetables that evening. And it was a chastened one who went to work next morning. At ten a.m. an official motorcar purred up the canyon. It halted opposite Tony and his gang. The roadmaster, looking more officious than usual, climbed out and gestured the unhappy foreman over to him.

By the time Tony complied, the roadmaster had a sheaf of reports in his hand and was scowling down at them.

"Spinozzi," he began, "I've got a complete report of the derailment yesterday. Bill Sullivan, the engineer, claims you were to blame. I realize you've been with this company fifteen years, but that doesn't excuse rank inefficiency. I'm sorry, but I'm forced to dismiss you. Get your things together and move out of the section-house. Another foreman will relieve you tomorrow. You're pulled out of service when you finish work today."

The roadmaster didn't wait for Tony to speak in his defense, but pocketed his reports, climbed back on his motorcar, and was gone.

Tony went through the motions of bossing his gang the balance of that day like a wooden man. Drumming back in his head was the fact Meester Sullivan had crucified him after all. The engineer had refused to consider sharp flanges on wheels, preferring to put the whole blame on the foreman's shoulders. As the drumming continued came the first slow surge of anger against the man who had been Tony's tin god.

That afternoon the king snipe worked his gang at the long siding midways of Ruby Canyon. Tony knew that the eastbound passenger train usually met the westbound one there. But he would have denied any ulterior motive in being there. Anger against the engineer had smouldered all day and was grown by that time to a molten glow.

There was no surge of pride in Tony's breast as Meester Sullivan throbbed up the main and halted in the clear. The head brakeman dropped off the train and walked forward to throw the switch for the west bound train. Skyrocket Bill settled back against his cab to scowl up the canyon where heat waves danced and lizards sunned themselves.

"I wanta tell you one thing!"

The voice cracked into Bill's left ear and he jerked his head around. Gazing at him with red eyes was the little foreman who'd tried to bribe him with cigars during the past several years, the little "domned furriner" who'd always looked at him with shining eyes. Tony's hands began gesticulating in time to the torrent of words which poured from his lips.

"All these years I thought you was my friend," said Tony. "But yesterday, you blame the wreck on me. Why? I know you could maka the blame on sharp flanges on your engine. But do you? No! So for you, Meester Sullivan, I say *pouf*!"

There was deadly insult in the Albanian's final word, and there was more insult in the gnarled finger he snapped before Bill's startled blue eyes.

Tony waited for no apology from the engineer. He expected none. He had relieved his anger to a degree and he slid back to the ground. But the satisfaction inside him was hollow. He felt like a man forced to denounce someone dear to him.

In the locomotive cab Bill was blinking rapidly. Rube Parmain, his fireman, crossed the deck.

"I reckon that little feller got yuh told just about right, Bill," Rube drawled. "Like I told yuh yesterday, after th' derailment, there wasn't no sense in gettin' his job. That guy has been kinda dumbly worshippin' yuh ever since I c'n remember. Must have been a stab where it hurt worst, yuh goin' against him like you did."

"He'll be after gettin' a job as laborer on a section somewhere else," Bill growled. "An' he won't be embarrasin' me be th' offer of a cigar every time he gets th' chance!"

The train they were to meet nosed into the long siding and when its tail lights cleared, Bill jerked open his throttle. His mustache moved as he talked to himself. Rube bowed his back and began appeasing the exhausts with scoops of black diamonds.

TONY'S black-haired wife, Christine, with true womanly intuition, sensed something wrong when her husband entered the section-house and dropped tiredly on a bench. He made no move to start hauling buckets of water from the river with which to slake the thirst of his parched flower garden. So she cornered him with rapid-fire questions.

Gradually she pumped the truth out of him. Then she went into a torrent of vituperation against Meester Sullivan, the roadmaster, and everybody else connected with the railroad, and ended by sobbing.

STRASBURG RAIL ROAD
*The Road to Paradise*
★
FUN FOR EVERYONE
Ride a full size, oldtime steam train on a round-trip thru the heart of the beautiful Amish and Penna. Dutch Country.
RAIN OR SHINE
Weekdays: 1, 2, 3, 4 P.M.
Sundays: 1, 2, 3, 4, 5 P.M.
ADULTS $1.25 CHILDREN 50¢
Rt. 741–STRASBURG
LANCASTER CO., PA.

FREE FOLDER
WRITE BOX 243-P
STRASBURG, PA.

RAILROAD MEN, IDENTIFY WITH YOUR HOBBY
1,000 GUMMED NAME/ ADDRESS LABELS WITH ZIP AND STEAM TRAIN IN TWO COLORS
Send $2.00 to
Mr. John Doe
123 13th St.
Your Town, State, Zip
GOLDEN WEST DISTRIBUTORS
P.O. BOX 1987, LONG BEACH, CAL. 90801

RAILROAD AUCTION
1000's of Steam & Electric Items sold at "your own price" every year! List FREE!
GRAHAME HARDY
Box 449, Virginia City, Nev. 89440

PENNSYLVANIA RAILROAD
All Steam! Locomotives 6987, 6743, 4249, 3885, 3843 and I-1's! Hear whistles in the mountains, "wolf calls" at girls, and echoes off the hills. Thrill to 2 double slotted I-1's lifting tonnage with slipping drivers and that nostalgic "in sequence—out of sequence" exhaust rhythm. Record No. 10, 33.3 rpm, 10" long play. New Jacket Design. $4.50 postpaid. Free Literature.
RAILROAD RECORD CLUB
Hawkins, Wisconsin 54530

WESTERN COLOR PUBLICATIONS

SEND FOR NEW
FREE CATALOG
*Calendars • Postcards*
*Christmas Cards • Placemats*
*Illustrations* • AND COMING SOON...
"The RIO GRANDE PICTORIAL"
100 years of railroading
*Thru the Rockies*
SUNDANCE Limited
P.O. BOX 6385 • DENVER, COLO. 80206

Tony heard the westbound night passenger train halt at the section-house. No need to look at his watch. The hotshot train was "on the advertised" and it was 1:55 a.m. Nothing except an emergency would have halted them here. Too well did Tony know the emergency. They were unloading his successor. Tony did not get out of bed. There was no use.

His successor hunted him up early next morning. He was a moon-faced, tobacco-chewing fellow with tufts of hair on the backs of thick fingers and a strange drawl.

"I'm Hobson, feller sent to relieve yuh," introduced the newcomer. "I'll want to occupy this section-house, so get moved out quick as yuh kin. Suppose yuh kin get out today?"

Tony shook his head. "Today, myself, Christine, and the children must crate an' pack our stuff. Maybe tomorrow we will be gone. Today, you will eat with us."

Hobson grunted.

"I hope you will water my pretty flowers and the bushes, yes?" the Albanian asked eagerly.

"I noticed them things clutterin' up th 'scenery. How do yuh water 'em?" asked Hobson.

"From the river I carry water in buckets," Tony stated proudly.

Hobson guffawed. "I'm here to run a section, not play nursemaid to a bunch of growin' truck!"

That day, after he had sweated over crating furniture and packing their belongings in boxes and barrels, Tony watered his beloved flowers for the last time. Nobody saw his tears as he lovingly touched each growing thing.

Hobson grudgingly ate with them that night. After some uncomplimentary remarks on the condition of Tony's track, he went to bed.

Tony crawled into the makeshift pallet they had made on the floor in the dining-room, but sleep would not come. Around 11 p.m. he slipped noiselessly from beneath the covers and tiptoed to the door. Outside, under a sky spangled with scintillating stars, the sad fellow sat down and rested his cheeks against his calloused palms. He sat there gazing into the darkness, listening to the plash of the river, wondering what would become of himself and his family.

Once he roused to sniff the night breeze which whispered from the east. Later he roused again. Plainly to his nostrils came the acrid odor of burning wood. Probably some tie piles set fire by the new foreman that day. But t smoke did not smell like that fro rotted ties.

Tony fidgeted. The odor smelled li that from burning Oregon fir, none which was used for crossties. Bridg were built with Oregon fir. *Sacre M* It could not be the bridge up by Mi post 446. That was almost five mil away.

A scant fifty feet long, spanning dry gulch on piles and bents the stru ture was protected by sheets of tin t tween ties and stringers. But it was ol weathered in wide cracks, and pun in places. Tonight Meester Sulliv would come rocketing west on the pa senger. Tony knew how Meester Su livan wheeled 'em, particularly if were a few minutes late. The bridge l on a tangent, but both sides were righ hand curves with towering sandsto shooting upward from engineer's sic

The acrid smoke odor came mo strongly. Tony got to his feet a slipped back into the section-hous From the bedroom occupied by Ho son came lusty snores. Tony found H shirt and trousers in the darkness. H slipped into them, picked up his ho nailed brogans, and lifted his te gallon hat from its customary peg. Ou side, he slipped feet into shoes a pulled on his hat. He resembled mushroom moving through the dar ness as he headed for the toolhouse.

Tony was a powerful man; and soo under his muscular persuasion, t chunky motorcar rolled outside. H heaved it onto the rails of the ma line. Then he struck a match. One a In fifty-five minutes Meester Sulliv would thunder past the section-hou —provided the smoke did not cor from a burning bridge. . . .

HIS DISMISSAL from the servi of the railroad company nev entered Tony's mind as the breeze c ated by the motion of the chatteri motorcar plastered his hat tighter his head and wriggled his mustache.

Bridge 468 was a ruddy gl against the night sky and the cany walls long before Tony came in sig of it. He rounded the last curve lik young meteor.

*Capristi!* Flames were leaping hi into the air as the dried-out, pitch-fill structure was consumed. And To realized he must reach the other si of it to halt Meester Sullivan in tim Thirty minutes from now the brid would be only a smouldering mass

**(Continued on page 48)**

# "70 The Decade of Leisure and Happiness"

## THE SWINGING PALM SHAVER

**Fits In The Palm of Your Hand**

***Cordless Electric-Micro Size-Portable . . .***

Here's our SWINGING SHAVER that just cries out for use and attention. Engineered and designed to provide a close, soft touch shave. Glides smoothly over your face, searching for those hard to find whiskers. A simple flick of the switch of this 4¼" marvel, transports you into the brand new world of Personal Care and Good Grooming. Great travel companion, perfect at home or office. Comes complete with battery, leatherette travel case and brush. Order #273.

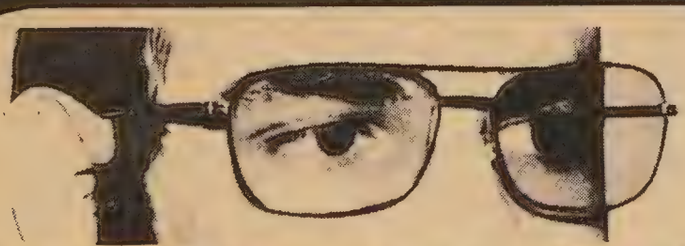
**Only** $8.95 **prepaid**

## TAKE ABOARD TIME SAVER STRATO-TRAVEL BAG

Brand new rugged "strato-travel bag" stylishly designed to fit under any airline seat—eliminates a tiring wait at baggage counters. Luxurious smart-looking dark saddle brown vinyl, with the look of rippled leather. Sturdy double nylon stitching, heavy duty zippers, locks and keys. Capacity for up to two suits — all your personal belongings — underwear, shirts, shoes, toiletries, etc. Full zippered enclosures—four separate compartments. Huge inside capacity. Measures a full 21" x 12" x 11". Order #187.

**COMPARABLE VALUE $19.95**

**ONLY $9.95** plus $1 postage



## SUPER VUE GLASSES PIERCE FOG AND HAZE

***Night Driving — Sporting Events***

Here are the new "SUPER VUE GLASSES" that will give you new perspective. These remarkable glasses pierce through fog and haze, eliminate blinding snow rays, soften the glare of pure white snow. Lens is made of 14-K gold powder glass. A tree clear beautiful view of the world around you. New cool looking lemon yellow glass in all wire metal rims. Today's fashion trend for the (cool) look. Ideal for outdoor sporting events and night driving. Instant contrast and sharpness plus clear vision

**SUPER VUE GLASSES** $3.98 ppd. **SUPER VUE CLIP ONS** $2.50 ppd.

**AMTECH CREATIONS, INC.**

## JOG FOR YOUR LIFE

### EXECUTIVE JOGGER

ENDORSED BY WORLD CHAMPION

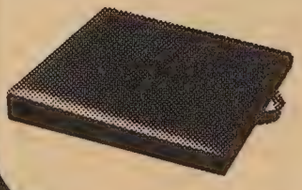
BILL EMMERTON

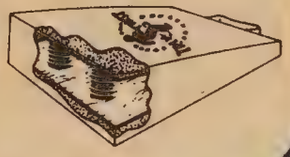
Bill Emmerton of Australia has jogged over 110,000 miles. At fifty-five he looks and feels like a kid. The indoor road toward better health and a longer life through exercise. Jog for your life — neither rain, sleet or snow can stop you — because your EXECUTIVE JOGGER lets you exercise indoors — in your pajamas, nude (if that's your thing). In dead of winter, or heat of summer, night or day. Scientifically designed action, reaction jogging. Naughyde top and foam cushioned springs. Both are durable and washable. Strategically placed wound coiled springs. Build up your cardo-vascular system. Your physical fitness is directly tied into your mental attitude. Measures a full 22 X 20 X 4". Keep under your bed. Jog three minutes in morning and three minutes at night. Great for his and her companionship.

**NOW ONLY**

$9.95 plus $1.00 postage.

Order #418





## HANDY ORDER FORM

AMTECH CREATIONS, Dept. ADV7
108 New South Road, Hicksville, L.I., N.Y. 11802

**Please RUSH the following. Satisfaction Guaranteed.**

_____

☐ Check or M.O. enclosed _____

☐ CHARGE TO CREDIT CARD # _____

☐ DINERS ☐ AMER. EXP. ☐ MASTERS

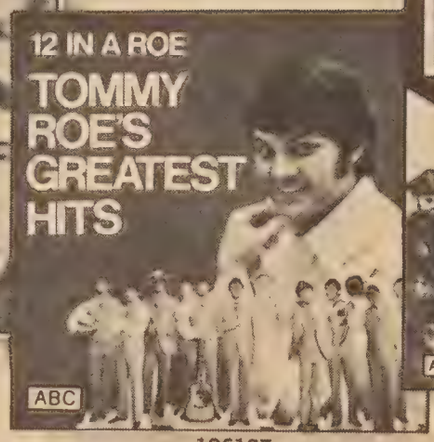
NAME .....

ADDRESS .....

CITY..... STATE..... ZIP.....

**N.Y. State residents add appropriate tax.**

186809



186197

185850

184507

171504

184994

185017

175596

173740

183137

181875

171157

183301

171140

160994

182386

163139

164152

180661

181156

183103

180281

184200

181909

184887

180299

172411

182246

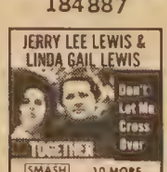
174995

183335

174375

183160

182410



183285

179341

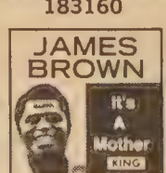
167692

182758

181669

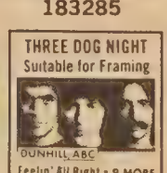
176602

178665



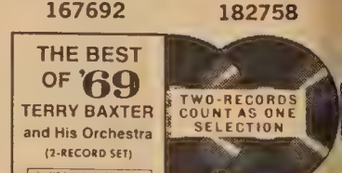
182428

184804



179671

171884



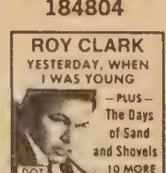
176792

134429

183202

110379

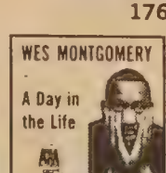
178814



180448

180968

180711



157883

180554

181677

176297

185868

184762

180315

179002

176628

180166

183186

# Any 12

**YES, IT'S TRUE** — if you join the Columbia Record Club right now, you may have your choice of ANY 12 of the hit records shown here — ALL 12 for only $3.98. And all you have to do is agree to buy as few as ten records (at the regular Club price) during the coming two years.

That's right! — you'll have two full years in which to buy your ten records. After doing so, you'll have acquired a sizable library of 22 records of your choice — but you'll have paid for just half of them . . . *that's* practically a 50% saving off regular Club prices! Without doubt, the Club offers you the "best buy" in records *anywhere!*

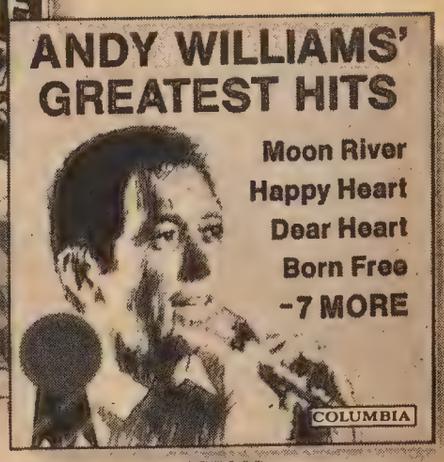
**AS A MEMBER** you will receive, every four weeks, a copy of the Club's entertaining music magazine. Each issue describes the regular selection for each musical interest and

© 1970 CBS Direct Marketing Services 945/S70

186270

184796

186395




187666

# ecords for $3.98 plus mailing and handling

**SAVE ALMOST 50% ON RECORDS**
*Savings are off regular Club prices*
**AS A MEMBER OF THE**
**COLUMBIA RECORD CLUB**

You simply agree to buy 10 records during the coming 2 years

ost 300 other records... hit albums from every field of sic from scores of record labels.

f you do *not* want any record in any month—just tell us by returning the selection card by the date specified... ou may use the card to order any of the records offered. ou want *only* the regular selection for your musical in- st you need do nothing—it will be shipped to you omatically. And from time to time, the Club will offer ne special albums, which you may reject by returning special dated form provided—or accept by simply doing hing... the choice is always yours!

**CORDS SENT ON CREDIT.** Upon enrollment, the Club open a charge account in your name... you pay for your ords only after you have received them. They will be mailed and billed to you at the regular Club price of $4.98 (Classical and occasional special albums somewhat higher), plus a mailing and handling charge.

**FANTASTIC BONUS PLAN.** As soon as you complete your enrollment agreement, you will automatically become eligible for the Club's generous bonus plan, which entitles you to *one record of your choice free* (plus 25¢ for mailing and handling) *for every one you buy thereafter!*

**SEND NO MONEY NOW—JUST MAIL THE COUPON.** Write in the numbers of the twelve records you want, for which you will be billed only $3.98, plus mailing and handling. Be sure to indicate the type of music in which you are mainly interested. Act today!

**COLUMBIA RECORD CLUB** Terre Haute, Ind. (CRC) *Where smart buyers shop for hits!*

30323

177089

113027

178400

181230

179291

B2238

172254

183608

175331

176776

184499

B3145

176594

181222

178392

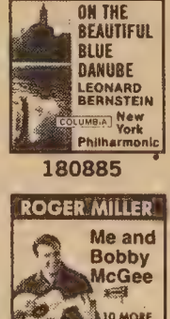
182378

79325

177683

126391

181685




180885

74607

177832

177519

180497

170357

182220

**SEND NO MONEY—JUST THIS COUPON**

**Columbia Record Club, Terre Haute, Indiana 47808**

Please enroll me as a member of the Club. I've indicated below the twelve stereo records I wish to receive for only $3.98, plus mailing and handling. I agree to purchase ten records during the coming two years, under the terms outlined in this advertisement. I may cancel membership any time thereafter. If I continue, I will be eligible for the Club's generous bonus plan.

**SEND ME THESE 12 RECORDS FOR ONLY $3.98**

| | | |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

**MY MAIN MUSICAL INTEREST IS (check one):**

☐ Listening and Dancing ☐ Teen Hits
☐ Country and Western ☐ Classical
☐ Broadway and Hollywood ☐ Jazz

Name.....
(Please Print) First Name Initial Last Name

Address.....

City.....

State.....Zip.....

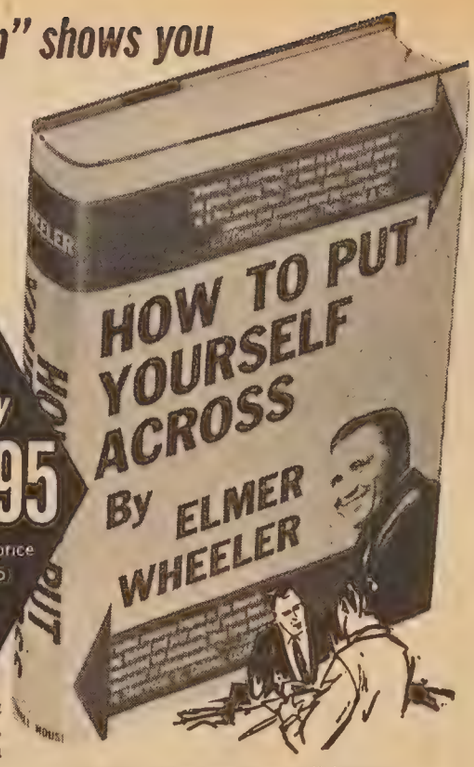
Do You Have A Telephone? (Check One) ☐ YES..... ☐ NO

*APO, FPO addressees: write for special offer*

258-7/7J

*Now—"America's #1 Salesman" shows you*

# How To Put Yourself Across




Yes, step by step, Elmer Wheeler shows you how to make your daydreams come true . . . 8 rules for self-made people . . . 6 ways to conquer complexes...how to overcome inferiority...the art of conversation . . . how to know what you want in life, and how to set your ideas into vital motion!

only $2.95 regular price $4.95

***Here, too, you'll discover why it pays to:***

- **BE A GOOD LISTENER**
- **RADIATE WARMTH**
- **GIVE PEOPLE AN INCENTIVE**

*This book, a best-seller at $4.95, is yours for a limited time only at the amazing price of $2.95.* Read it. Study Elmer Wheeler's exciting formula for personal success. *You have a money back guarantee that it will work for you, as it has for thousands of others!* Full refund privilege is guaranteed if it doesn't help you!

***In these exciting pages you will discover hundreds, literally hundreds of ways to make you vital, dynamic—more successful in life!***

**• ABOUT THE AUTHOR •**

Elmer Wheeler, known as "Mr. Sizzle" to millions of salesmen around the world, is always in great demand for speaking engagements. Early in his career Elmer took as his motto "Don't sell the steak—sell the sizzle," and turned it into an imposing business philosophy with a string of successes to prove it.

THE PENTHOUSE, Dept. AN-RR-80 H
205 East 42nd Street
New York, N.Y. 10017

Rush _____ copies @ $2.95
Enclosed is check or M. O. for $_____
NAME _____
ADDRESS _____
CITY _____ STATE _____ ZIP CODE _____
(Add 35¢ postage and handling)


charred timbers. No tell-tale crimson would shine beacon-like against the night sky.

Tony shut his eyes tight, bowed his head, and buried his face in his arms. A molten blast struck him, scorched his tough skin to brittle parchment. One tiny gulp of air and Tony knew his lungs would be burned if he breathed. So he held his breath.

He opened his eyes, looked back toward the gas tank. A tiny blue flame hissed from the air vent in the cap as Tony leaped off. The tank exploded suddenly like a stick of dynamite, showering specks of flame.

Tony's brain wasn't working so well. One thought registered. He must run forward and stop Meester Sullivan. He had no red lantern, but the engineer would see him waving his arms.

Skyrocket Bill did see the king snipe, still wearing his big hat. He saw the flailing arms and halted less than ten feet from them. Tony stumbled below the cab.

"The wooden bridge," he shouted. "She'sa all burned to hell!" Then he went out like a light . . .

It's hard to keep a good man down; and although Tony had no more business on the right-of-way than a bum, the well-singed little fellow stayed right on the scene, helping as much as his burned hands permitted while a hastily summoned bridge gang threw in a temporary structure.

During it all Skyrocket Bill pieced together the events of the night. Ton must have crossed the bridge when th flames were shooting the highest. Th exploded gas tank and wrecked moto car gave mute testimony to that. Bu the engineer made no comment. Sky rocket Bill was no man to lavish prais on anybody.

THEY were ready to cross the ne bridge by ten a.m. Tony sat for lornly on the end of a tie, his achin head bowed. Bill hesitated before tug ging open his throttle. Instead, h dropped to the ground beside Tony an he said gruffly: "Better get into th' cab Tony. Yez c'n ride home with us. Ar there's some things I want to show ye about your track."

Tony raised weary, lashless eyes. H shrugged. "She's a no longer my track Meester Sullivan," he faltered.

"Be th' love of Virgin Mary, wh says she ain't your track?" explode Bill angrily. "Because of a slight favo owed me by th' roadmaster, I'm tellin yez she *is* your track. Get up an' rid th' seat box behind me."

Bill hesitated as his eyes fell on foil-wrapped cigar, badly singed an smudged, sticking from Tony's poc ket dejectedly.

"An' if yez ain't gonna be afte smokin' that cigar, yez might give it t me," he added.

A great light glowed in the blac eyes of Tony Spinozzi as he pulled ou the weed and extended it. "Sure, Mee ster Sullivan."

"Me name is Skyrocket Bill to m friends," said the engineer, and led th way toward his engine cab.


**For 73 years RAILWAY MAGAZINE has been closely connected with the making of railroad history.**

Published monthly it has a full colour cover and a Panorama section containing up to twelve pages of nostalgic and news pictures with comprehensive descriptions. Each issue carries an article on Locomotive practice and performance; these are authoritative accounts of steam, diesel and electric locomotive performances with illustrations and tabulated data. The contents are carefully balanced with articles on modern and historical railroad subjects —mainly British but including overseas items.

**Subscription post free, $6 per year**

**RAILWAY MAGAZINE**
**DORSET HOUSE,**
**STAMFORD STREET,**
**LONDON, S.E.1. ENGLAND**

# Ed Crouch Never Dreamed He'd Earn Up To $2,000 A Month When He Mailed The Coupon

***But he does . . . And his car and business expenses are paid, too. Read how he moved up fast to an exciting, top pay career***

For 10 long years Ed Crouch worked n a drive-in theater in California. He aw a lot of movies, but he didn't see nuch in the pay envelope. A bright fu- ure just wasn't in the coming attrac- ons.

So Ed became dissatisfied, restless for nange. He wanted a fresh start in a eal pay-off business. But what do you o when you've got 10 years of your life nvested in one job?

If you're at all like Ed Crouch, you tart looking around for a better oppor- unity. And that's what Ed was doing hen he mailed the coupon that changed is life.

That coupon, the same one that's on his page you're reading right now, rought Ed a free book of facts on the ooming Accident Investigation field. nd it was an eye-opener!

## 30 MINUTES THAT CHANGED THE FUTURE FOR ED CROUCH

Ed learned that Accident Investiga- on is part of the *biggest business in he world today* — a $20 billion industry f wide-open opportunities.

He learned that more than *22 million* ccidents and losses must be investigated nd settled every year in this country. Ie learned that more and more trained nen are urgently needed now, every- here, to handle this huge workload — n cities, towns and rural areas.

It took Ed Crouch just 30 minutes to kim through that free book of facts. ut that half-hour changed everything. Ie knew he had found the opportunity f a lifetime.

## EARNS UP TO $2,000 A MONTH, EXPENSES PAID

Today Ed is a professional Accident Investigator with an independent firm in California. His income ranges from $1,200 a month up to $2,000 a month! He has car and all business expenses paid. He's on top and set for life.

Ed Crouch has the kind of life and income now that he never even dreamed of when he mailed the coupon on this page. But how did he do it? How did he make such a success when he had absolutely no experience in the field?

It was simple. Ed just followed the path hundreds of others have taken to new careers in Accident Investigation.

He trained at home in his spare time. He read lessons-by-mail from Universal Schools of Dallas, Texas.

## HE DIDN'T MISS A PAYCHECK

Ed learned that Universal is the old- est, largest, most successful correspond- ence training school in the field. He learned that Universal has trained and placed more men in Accident Investiga- tion careers than any other organization — 80% of them men with no experience, no college.

So Ed enrolled. He studied Univer- sal's famous 50-lesson course in his spare time at home. He kept right on with his old job while he trained. He didn't miss a single paycheck.

In brief, clear, interesting lessons, Ed learned exactly how to step in and start making money quickly in Accident In- vestigation. And that's what he did.

"The training I received from Uni- versal Schools put me where I am to- day," Ed writes. "There are not words to thank them enough. Universal is the top school in the field."

Ed Crouch's income is unusually high and not typical of the field. But it shows what an inexperienced man can do with the help of Universal training and place- ment service.

Here, for example are just a few re- ports from other recent Universal grad- uates:

**"My income has more than doubled."**— *James T. Woodruff, Louisiana.*

**"An immediate 40% increase in wages."** —*Bill Ruhnke, Missouri.*

**"A raise every three months for the next two years, plus new car and expense account."**—*Oscar Singletary, Georgia.*

**"My salary has increased by 63%."**— *Marcel Roy, Canada.*

## SEND FOR FREE BOOK TODAY

Send for your free book of facts on this remarkable field — the same book that put Ed Crouch and so many others on the road to bigger opportunities.

Remember, more trained men are ur- gently needed right now, everywhere — in cities, towns and rural areas. There's opportunity wherever you live or wher- ever you want to live.

Simply mail the coupon below and we'll send your free book immediately. Or, write to Universal Schools, 6801 Hill- crest Ave., Dallas, Texas 75205.

When Ed Crouch mailed this coupon, he didn't dream he'd someday be mak- ing up to $2,000 a month. But he does!

*APPROVED FOR VETERANS' TRAINING*

### *FREE PLACEMENT SERVICE*

Universal Schools provides prompt, effective job placement help in any part of the United States and Canada. More than 1,000 companies have re- quested and receive our monthly list of graduates. Universal trains and places more men in the Ac- cident Investigation field than any other school. Or, if you would prefer to start your own full or part time business, we will show you exactly how to do it.

## SEND FOR YOUR FREE BOOK OF FACTS

**UNIVERSAL SCHOOLS, Dept. AM-7**
**6801 Hillcrest, Dallas, Texas 75205**

Gentlemen: Please rush free book on opportunities and earnings in the booming Accident Investigation field. No obligation. No salesman will call.

Name_____ Age_____

Address_____

City_____ State_____ Zip Code_____

# REAL STEAM TRAINS

**15" — 16" — 24" — 36"**

**GAUGES**

*"LITTLE TOOT"*

**CROWN METAL PRODUCTS CO.**
**WYANO, PENNA. 15695**

Send for FREE circular



**BACK ISSUES OF RAILROAD MAGAZINE**

**Most issues from the past 2 or 3 years are still available.**

**By mail, 50¢ each, 12 for $5.**

**For current list, send 6¢ stamped, self-addressed envelope to**

**RAILROAD MAGAZINE**
**205 EAST 42nd STREET**
**NEW YORK 10017**



**Riding "THE SILVERTON" this summer? You'll enjoy your trip more with:**
**CINDERS & SMOKE**

The only complete book on the D&RGW's narrow gauge passenger train between Durango and Silverton, Colo. Tells about the Railroad, History, Flowers, Trees, and Rocks with Maps, Photos, Entertaining Text. Second edition, 100 pages. $2.25 pp. Need a wall display for your railroad room? Rolled 18" x 42" ROUTE MAP of the SILVERTON BRANCH shows track, geology, old mines, snow slides. $1.75 pp. **WESTERN GUIDEWAYS, Dept. R, P.O. Box 15532, Lakewood, Colo. 80215.**



**For sale:** Genuine English Lancashire and Yorkshire Railway documents from the 1880's, $1.50 each; also old brass paycheques $5. each; 25 pre-grouping Irish tickets, $2.75; sales list $.25; all prices include airmailing; $.35 brings our prospectus; all British railway books and magazines available. Write: East Lancashire Railway Preservation Society, Helmshore Station, Rossendale, England.


## Our Cut-Rate Book Service

As a service to readers, we sell books at about 5 percent off publisher's price. Our discount applies to almost any English-language railbook still in print, if it retails at $3.50 or more. All postpaid.

New York State residents must enclose 3 percent sales tax with each order. But we do not charge a New York City sales tax because our book agency is located in New Rochelle, N.Y., which has no city sales tax. To avoid delay, send separate checks for books and magazine subscriptions.

The books are available only by mail. *Railroad Magazine Book Service* 205 East 42nd Street, New York, N.Y. 10017. Here are a few suggestions:

| | List Price | Our Price |
|---|---|---|
| THE RAILROAD SCENE, Wm. Middleton | $ 8.95 | ($ 8.50) |
| THE RAILROAD CABOOSE, by Wm. F. Knapke | $ 7.95 | ($ 7.55) |
| BESSEMER & LAKE ERIE, 1869-1969, Beaver | $10.00 | ($ 9.50) |
| TRAIN WRECK! Wesley J. Griswold | $ 5.95 | ($ 5.65) |
| CN STEAM POWER, by Clegg and Corley | $12.95 | ($12.30) |
| VINTAGE STEAM, by J. E. Kite | $ 5.75 | ($ 5.55) |
| LAKE SUPERIOR RAILROADS, Dorin | $10.95 | ($10.40) |
| SHORTLINES OF ARKANSAS, Hull | $ 9.95 | ($ 9.45) |
| L&N STEAM LOCOMOTIVES, Richard Prince | $12.50 | ($11.90) |
| IRON HORSES TO PROMONTORY, Gerald M. Best | $10.00 | ($ 9.50) |
| WESTWARD TO PROMONTORY, Barry B. Combs | $10.75 | ($10.20) |
| INTERURBAN INTERLUDE, by E. J. Quinby | $ 7.95 | ($ 7.55) |
| PENNSY POWER II, Staufer and Pennypacker | $15.00 | ($14.25) |
| TRAIN WATCHER'S GUIDE TO CHICAGO | $ 3.15 | ($ 3.00) |
| HEADLIGHTS & MARKERS, Donovan and Henry | $ 6.95 | ($ 6.60) |
| MEXICAN NARROW GAUGE, by G. M. Best | $ 7.50 | ($ 7.15) |
| NORTHERN PACIFIC, by Chas. Wood | $13.95 | ($13.25) |
| DESTINATION TOPOLOBAMPO, Kerr and Donovan | $ 7.95 | ($ 7.55) |
| TRAIN WRECKS, by Robert C. Reid | $12.95 | ($12.30) |
| AMERICAN LOCOMOTIVES, by John H. White | $20.00 | ($19.00) |
| DOWN AT THE DEPOT, by Edwin P. Alexander | $15.00 | ($14.25) |
| THE AMERICAN STEAM LOCO, Vol. I | $14.50 | ($13.75) |
| OVER THE HILLS TO WOODSTOCK, by Mead | $ 3.50 | ($ 3.35) |
| MORRISTOWN & ERIE, T. T. Taber III | $ 6.95 | ($ 6.70) |
| STEAM IN '60's, Ziel and Foster | $10.00 | ($ 9.50) |
| 20TH CENTURY, by Lucius Beebe | $ 5.95 | ($ 5.65) |
| DELAWARE & HUDSON, by Shaughnessy | $15.00 | ($14.25) |
| NC&StL: HISTORY, STEAM LOCOS, by Prince | $12.00 | ($11.40) |
| ALASKA RAILROAD, by Edwin Fitch | $ 7.95 | ($ 7.55) |
| BOSTON & ALBANY (politics, economics), Salsbury | $10.00 | ($ 9.50) |
| MAN FROM STEAMTOWN (Blount), by Adair | $ 3.95 | ($ 3.80) |
| RAILS TO BLUE RIDGE, H. H. Harwood | $ 4.50 | ($ 4.25) |
| NARROW GAUGE TO REDWOODS, Dickson | $ 6.95 | ($ 6.70) |
| NYC EARLY STEAM POWER, by Staufer | $15.00 | ($14.25) |
| ALL ABOARD! Willis F. Dunbar | $ 7.95 | ($ 7.55) |
| RAILS TO POSSUM TROT, by J. A. Stowe | $ 2.50 | ($ 2.40) |
| SUPER POWER STEAM LOCOS, by R. J. Cook | $ 8.95 | ($ 8.50) |
| RAILROADS OF YOSEMITE VALLEY, H. Johnston | $ 8.50 | ($ 8.05) |
| SNOWPLOW, by Gerald M. Best | $ 6.00 | ($ 5.70) |
| THE TRAINS WE RODE, Beebe and Clegg, Vol. I | $15.00 | ($14.25) |
| THE TRAINS WE RODE, Vol. II, Beebe-Clegg | $15.00 | ($14.25) |
| LOCOMOTIVES THAT BALDWIN BUILT, Westing | $12.95 | ($12.30) |
| OPEN THROTTLE (rail-fiction stories) | $ 3.75 | ($ 3.55) |
| RAILROAD AVENUE, by Freeman Hubbard | $ 5.95 | ($ 5.65) |
| GREAT DAYS OF THE CIRCUS, by Freeman Hubbard | $ 5.95 | ($ 5.65) |
| STEAM POWER: C&NW, by Charles T. Knudsen | $10.00 | ($ 9.50) |
| STEEL RAILS TO SUNRISE, Ziel and Foster | $12.95 | ($12.30) |
| GREAT LAKES CAR FERRIES, by Geo. Hilton | $ 6.00 | ($ 5.70) |
| THE OVERLAND LIMITED, by Lucius Beebe | $ 5.95 | ($ 5.65) |
| THE MA & PA, by George W. Hilton | $ 5.00 | ($ 4.75) |
| THE RUTLAND ROAD, by Shaughnessy | $10.00 | ($ 9.50) |
| HAWAIIAN RAILWAYS, by John Hungerford | $ 4.95 | ($ 4.70) |
| HISTORIC RAILWAY DISASTERS, by O. S. Nock | $11.00 | ($10.45) |
| RAILROADS IN MICHIGAN, W. F. Dunbar | $ 7.95 | ($ 7.55) |
| LOCOMOTIVES OF DICKSON MFG. CO., Gerald Best | $10.00 | ($ 9.50) |
| COLLECTOR'S BOOK OF LOCOMOTIVE, E. Alexander | $15.00 | ($14.25) |
| ATLANTA AND THE OLD SOUTH, Wilbur G. Kurtz | $ 5.98 | ($ 5.70) |
| RAIL ROUTES SOUTH, Leonard P. Curry | $ 5.95 | ($ 5.65) |
| NEW HAVEN RAILROAD, John L. Weller | $ 8.95 | ($ 8.50) |

**PROVEN IN THE LABS — PROVEN ON THE ROAD — PROVEN ON THE INDIANAPOLIS SPEEDWAY — and finally released to the public!**

Yes, proven at Indianapolis — proven in the same test laboratories used by Ford, General Motors and Chrysler . . . proven by the world's largest automobile fleet owners! An exciting new scientific "breakthrough" that means . . . no matter what kind of gas you use . . . no matter what kind of car you own you can now pile up 100 miles of driving a week, month after month and fill your gas-tank as little as once a month . . . pile up 100 miles of driving a day all 365 days of the year . . . and save up to 500 gallons of gas each year!

# NOW! 30 DAYS OF DRIVING ON A SINGLE TANK OF GAS!

## ven more startling, now save up to $16 a month, to 50 gallons of gas each month, hout changing a single part on your car!

**boratory reports . . . PLUS road tests conducted on Indianapolis proving nds reveal you may now get as much as 37 miles of driving from each gallon is . . . save up to 50 gallons of gas each month . . . save up to $200 on your ach year!**

nonths ago, for perhaps the first time story, the United States Government d patent protection to an invention has been classified ILLEGAL! Sound ge? Not really here's why:

sure you're familiar with the famous ine-economy tests run by all the ir oil companies. Well, do you know the remarkable new invention de- ed on this page is actually banned n these tests because it is TOO ECTIVE! Do you know that because nvention saves so much gasoline . . . because it gives so much economy, actually ILLEGAL for a test-driver one on his car! And do you know because it boosts gasoline mileage up more miles per gallon . . . it has ally been OUTLAWED in every gnized cross-country economy run . . . ly because the officials who conduct tests were forced to rule that it gives ars that have it AN UNFAIR AD- TAGE!

her words, if you are a person plan- on entering one of these cross-coun- conomy runs . . . then this message is for you. YOU JUST WON'T BE OWED TO USE THIS NEW IN- TION—SORRY, BUT IT'S SIMPLY EGAL. BUT — if you are a person is not interested in setting any rec- . . . who is only interested in getting miles per gallon than you ever ned possible — and doing it the very way that many of America's leading rations are doing at this very mo- — then what you are about to read rhaps the most thrilling and exciting in automotive history.

### EST DRIVERS REPORT UP TO MORE MILES PER GALLON —

name of this great new invention is G. T. ENERGY CHAMBER . . . and is no ketter way to describe to you ncreased performance and economy I give you . . . than to tell you of the bshell effect" it had on research sci- ts and test-drivers, who simply refused lieve their own gasoline gauges when first tried it out. Look:

### CUTS GASOLINE COSTS TO AS LITTLE AS 1¢ A MILE

hen the G. T. ENERGY CHAMBER irst tested by the same research labo- ies used by Ford, General Motors Chrysler . . . results were so over- ming, (a staggering increase of up to 68 per cent) . . . it actually lowered gaso- line costs to as little as **ONE CENT A MILE.**

2. When tests were made by the world's leading auto rental system with this incred- ible money saving invention . . . and then test-run on the road and on such world fa- mous proving grounds as the Indianapolis Speedway . . . the test-drivers of these vehicles were absolutely amazed to see big **8 cylinder sedans get better gas-mileage than small European economy cars!**

3. When large fleet owners and some of the nation's largest taxi fleets tested this great new invention to determine just how much gas it would save them . . . the re- sults were so dramatic that within 30 days they reported savings of not hundreds . . . but thousands of gallons of gas the very first month alone!

### UP TO 500 MILES OF DRIVING FROM A SINGLE TANK OF GAS

Yes, from test after test . . . road tests, laboratory tests, tests by some of the world's most famous drivers . . . come re- ports of cars that drive for hundreds and hundreds of miles ON A SINGLE TANK OF GAS! Reports of test cars from Ford, General Motors, Chrysler that get more miles per gallon today than when they were brand new! Reports of big, luxury sedans that weigh 2½ times more than small European cars . . . yet get better mileage, better performance and huge dollar savings thanks to this new miracle invention.

### BEST PROOF OF ALL!

**World's Leading Rent-A-Car Company Road-Tests Amazing New Invention For 3 Solid Months . . . Then Orders Fleet Of Cars IMMEDIATELY EQUIPPED! they report "Savings of up to 54 gallons a month per car"**

Yes, from one of the nation's largest automobile fleet owners comes the most dramatic proof of all . . . A company that spends more money on gasoline in one weekend than the average person spends in a lifetime . . . they tested this incredible new invention and here is what they found. BOOSTED GASOLINE MILEAGE A WHOPPING 32% ON ALL CARS TESTED. Wouldn't you like to save up to $200 a year on your car? For full details read the rest of this page.

### IF IT WORKS SUCH MILEAGE-MIRACLES, HOW COME THE CAR MANUFACTURERS HAVEN'T INSTALLED THIS TYPE UNIT IN THEIR CARS? — THE ANSWER IS THAT TWO ALREADY HAVE!

By now you are probably wondering just what is the G. T. ENERGY CHAMBER . . . and how does it work? Well, to make a long story short . . . if you were to look under the hood of one of those $20,000 European luxury cars like the Maseratti or the Aston-Marton, you would see sit- ting in those engines . . . a special gasoline unit . . . especially designed to extract more blazing power, more energy from each gallon of gasoline. This remarkable booster-unit is what gives these cars such magnificent performance . . . such TOTAL POWER . . . such increased engine effi- ciency.

And this is precisely what the G. T. ENERGY CHAMBER is designed to do — enable your engine to extract more piston-driving power, more raw, blazing energy and more gasoline economy . . . ONLY, instead of costing $100 to $150 (like the European booster-units) . . . the G. T. ENERGY CHAMBER costs but a mere fraction.

That's because after years of intensive research automotive experts have finally found a way to simplify these booster units . . . reduce the number of parts in each unit . . . mass produce them . . . slash costs to a mere fraction . . . and make them available at a price so low it's almost too ridiculous to mention. Why do you realize what this means to you if you are a person who is determined to save yourself up to $16 a month on your gas bills . . . up to 50 gallons of gas each month . . . yes, up to $200 a year on wasted gasoline.

### INSTALLS IN MINUTES — PAYS FOR ITSELF IN AS LITTLE AS 15 DAYS!

It means that no matter what kind of car you now have . . . no matter how old that car may be . . . no matter what condition it is in . . . no matter how many miles you pile on each month . . . here at last is the automotive discovery you've long dreamed about . . . and has now come true.

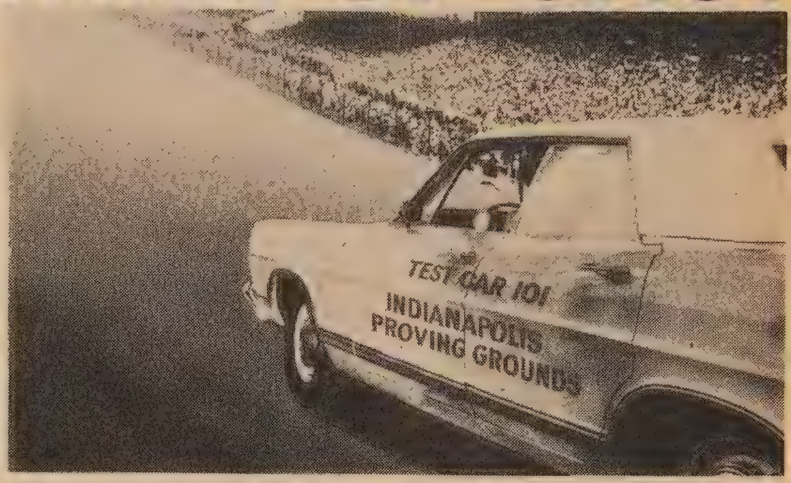
Because, from this day on you too can now save up to 500 gallons of gas each and every year. NOW you too can drive for weeks and weeks on end without ever stopping at a service station. Now you too can drive across 6 states of the union on just a single tank of gas, blaze a trail from New York to Chicago on just 2 or 3 tankfuls. In other words, perform mileage miracles that only yesterday you thought were impossible.

So if you too want to achieve the same wondrous results as America's largest automotive fleet owners, by Indianapolis test-drivers, and by research scientists at the very same testing laboratories used by Ford, Chrysler and General Motors, then take advantage of this special Free-Trial introductory offer. Remember, all you risk is the few minutes it takes to fill out the special reservation coupon below, and you have a lifetime of driving convenience and economy to gain.

### THIS OFFER EXPIRES IN 15 DAYS — YOU MUST ACT NOW!

Now the price of the G. T. ENERGY CHAMBER on this special introductory offer is not the 15 or 20 dollars you might expect . . . but only $5.95. Why, you'll save up to 10 times that amount in gaso- line savings in no time at all . . . not to mention the hundreds of gallons of gaso- line and hundreds of dollars in money you save year after year.

However, due to the enormous demands of trucking companies, car-rental com- panies, taxicab fleets and other large users, only a limited number of G. T. ENERGY CHAMBERS can possibly be allocated each month for consumer orders. Therefore, all orders must be filled on a first-come, first-served basis. So to take advantage of this limited introductory offer . . . mail the no-risk coupon today!




**HERE IT IS — IN ACTION — The miracle G. T. ENERGY CHAMBER,** caught by the eye of ultra high-speed cameras at one of the world's most famous proving grounds. Yes, here on the big viewing console you see dramatic picture-proof of tests conducted by leading automotive authorities at the Indianapolis Speedway . . . tests that PROVE you can now actually take ordinary gasoline . . . feed it into your engine in a new and different way . . . trigger it into piston-driving energy . . . and unleash a blazing source of power for your car. For full documented proof of just how this amazing new discovery can save you up to $200 in gasoline bills in the next 12 months . . . read the rest of this page. (Tests performed by official Indianapolis test driver.)

### LOOK HOW EASY IT IS!

you do is simply attach the G. T. ERGY CHAMBER on your fuel line. ce it is a precision instrument, with pecial model for each make car, there no special adjustments for you to e. They've already been made for at the factory. You simply screw it place . . . and that's all. In fact, so easy you need not know a single g about an engine to install it — easy picture directions accompany h unit. Total installation time: 3 to 5 utes. Total savings on gas: up to 0 a year!

**ORDER TODAY — ON FULL, MONEY BACK GUARANTEE**

**AMERICAN AUTOMOTIVE UNITS INC. Dept. 1160**
**4806 Bergenline Avenue, Union City, N. J. 07087**

Please rush me the sensational **G. T. Energy Chamber** immediately! I understand the price is $5.95 for which I enclose cash, check or money order. It is under- stood that I may return the unit anytime for full purchase price refund if I am not fully satisfied.

Make of Car _____ Year _____

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

SPECIAL OFFER: Purchase one for yourself and one for a friend and save even more. Order two **G. T. ENERGY CHAMBERS** for just 10.95 (a savings of $1.00) same guarantee as above. Make of Second Car..... Year.....

( ) C.O.D. orders enclose $1.00 deposit. Same money back guarantee.

APPROVED FOR VETERANS

*Precision Drawing Instrument Set, Professional Drafting Board Outfit & Fingertip Tilting Drafting Table are given to you with your complete North American Course in Drafting.

***Coast-to-Coast Shortage of Trained Draftsmen Opens Thousands Big Salary Jobs for Beginners!***

Now you can take your pick of thousands of big salary jobs open to Draftsmen (see "help wanted" sections of metropolitan newspapers). Huge nationwide demand... U.S. Dept. of Labor reports "42% more Draftsmen needed in next 10 years—not enough applicants to fill drafting jobs available now!" Our easy "Quick-Learn" Method has helped hundreds toward good income, security and prestige as Draftsmen. Why not you?

**YOU NEED NO DRAWING SKILL... NO TECHNICAL ABILITY**

NASD's staff of Professional Draftsmen guide you step-by-step. With our spare time home-study plan you work on actual projects. Makes learning fun—easy to remember, too. Many graduates have succeeded with only grade school training. Others report good earnings drafting part time while still learning!

...when you train at home with NASD for a

**HIGH PAY JOB IN DRAFTING!**

**Earns $820 Month!**

"My first position after completing your course jumped my income from $350 to $820 per month."—G. W., Tenn.

**Big Promotion!**



I was promoted from the production line ahead of 4 others and got a good pay raise."—W. A., Wisc.

***RUSH COUPON FOR FREE KIT...***

Mail coupon today for **FREE "DRAFTING CAREER KIT," Sample Lesson,** Drafting **Aptitude Test** including intriguing new **5-Way Drafting Instrument** & 20-page **Book** "Your Future in Drafting"—jam-packed with revealing facts on your opportunities to win top pay and job security in Drafting. No salesman will call. Everything sent FREE and WITHOUT OBLIGATION. Write today!

**North American School of Drafting,** Dept. 04047
**4500 Campus Dr., University Plaza, Newport, Calif. 92660**
Rush **"DRAFTING CAREER KIT",** including **Book, Sample Lesson, Aptitude Test & Drafting Instrument — ALL FREE!** *No salesman will call.* G.I. Approved.

NAME_____ AGE_____
ADDRESS_____
CITY_____ STATE_____ ZIP_____
A home-study program in association with Cleveland Engineering Inst.

## BOOKS OF THE RAILS

*by Albert Herskovits*

**STANIER LOCOMOTIVES, by Brian Haresnape, hard cover, 128 pages, 7 x 9½", illustrated, roster, Ian Allan Ltd., $5 a copy.**

Sir William Stanier, for many years chief mechanic Engineer of the London Midland & Scottish Railway, left an indelible mark on British steam locomotive design. This book describes the engines built under his guidance, in clearly-written text. Each class is described in a separate chapter and the photos are well chosen. *Stanier Locomotives* is fully up to Ian Allan's high standards.

**THE GREAT RICHMOND TERMINAL, by Maury Klein, hard cover, 323 pages, 6 x 9½", maps, appendices, index, University Press of Virginia, Charlottesville, Va., $9.50.**

The author's purpose here is to give a case history of this large system to illustrate the South's development in the growing days of American industry. Predecessor lines are thoroughly discussed, as are the men who founded them. The account is highly literate, but stresses finances and board-room politics. Little is said about the men who worked the road or the elements that normally give a railroad its unique flavor. There is no mention of motive power. Those who enjoy reading about proxy fights, however, should find this book fascinating.

**RAILWAYS: *The Twentieth Century*, by T.M. Simmons, soft cover, 48 pages, 6x5¾", illustrated, printed for Her Majesty's Stationery Office, London, England, $1.40.**

Full-page color illustrations are on every other page of this booklet, which shows many of the model locos and trolleys on display in London's Science Museum. Some are models of the first Atlantic types to run in England. Available from British Information Service, 845 Third Ave., New York, N.Y. 10022.

**THE DIRECT CURRENT TRACTION MOTOR, by D.A. Lightband and D.A. Bicknell, hard cover, 436 pages, 6x9½", tables, equations, graphs, index, Business Books, Ltd., Mercury House, Waterloo Road, London SE 1, England, $22.80.**

For those interested in the mechanics of traction motors, this is a comprehensive textbook. Sample chapters include "Armature Windings and Their Insulation," and "The Predetermination of Temperature Rise." Not recommended for the average railfan.

**THE PACIFIC TOURIST, edited by Frederick E. Shearer, hard cover, 379 pages, 6½x9", engravings, index, testimonials, Crown Publishers, New York, $2.95.**

A reprint of an 1870's edition of a popular rail travel guide, this book has fine old prints and much interesting material on scores of Western cities, points of interest, and numerous shortlines of the time. The price is very modest.

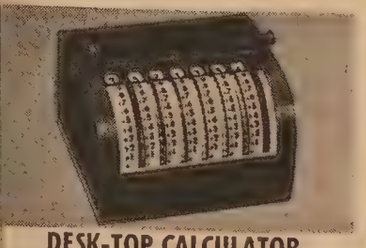
**THE AMERICAN RAILROADS, by John Francis and Robert Francis Rando, hard cover, 63 pages, 5½x8½", illustrated. JFR Pubilshing House, 106 Clinton St., Delaware City, Del. 19706, $4.95.**

The authors provide a brief and somewhat sketchy history, starting with the 1804 Evans engine. There is nothing new here for the history buff, but we think the book would make enjoyable reading for a younger railfan. It is easy to understand and is free of technical language; in short, a good beginner's book. Included is a railroad "ghost" story entitled "The Woman in White" (not to be confused with the famous romance by Wilkie Collins).

### FULL LENGTH MINI-MIRROR!

Gals! Fits in your purse, amazing mirror is small in size only. Don't miss a thing from top to toe, good grooming anytime, anywhere. Just 4" high, tucks away into purse or pocket. Easel back to stand on dresser. Great Gift!

**6922-Top-To-Toe Mirror** .....$1



### DESK-TOP CALCULATOR

Gives fast and accurate solutions to math chores at home, business. Adds, subtracts, multiplies in seconds, totals to 99,999.99. Helps you remain true to the budget, taxes, bank balance. 5½ x5¼". Lowest price ever!

**3098-Desk-Top Calculator** .....$5.98

### INITIALED MONEY BELT

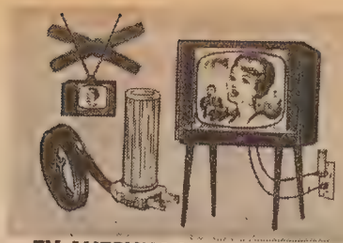
Up to 3 initials (specify). Genuine cowhide belt adds a handsome note, SECRET zippered inner pocket holds currency safe! 1¼" wide, brown with golden buckle, black with silvery buckle. State waist (28 to 44), color.

**D 2368-Money Belt** .....$2.98

### "DIAL" HOLDER LETS YOU INHALE LESS

Use 100% inhalation the 1st week, turn to 80% the 2d week, 60% the 3rd, then 40, 20 and finally 0% inhalation—at last you've quit smoking. Finally with the unique dial at ZERO the smoke is harmless, habit kicked!

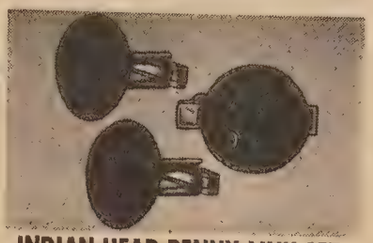
**8651-Stop Smoking** .....$4.98



### TV ANTENNA YOU PLUG IN!

Just attach to set, plug into electric socket, peaks TV to better reception, bright, clear picture even in fringe areas! No more clumsy rabbit ears or outdoor antennas necessary! Uses new TV full power, boosts old sets.

**5029-Power-Plug Antenna** .....$1.98



### INDIAN HEAD PENNY LINK SET

American Indian Indian Head pennies fashioned into unusual jewelry. Rare, expertly cleaned & polished, each MUST be at least 50 YEARS old! Genuine collector's items, value grows with time.

**3047-Penny Links** .....$3.98
**3048-Penny Tie Bar** .....$2.98

### STEP-ON AIR PUMP

Quickly, easily inflates air mattresses, seat cushions, rubber boats, beach balls, tires. Light, compact, plastic pump ideal for sportsmen, campers. Use as bellows to get fire going! 3½" dia. pump, 15" hose.

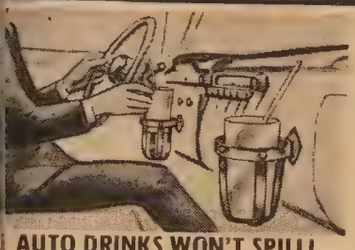
**6535-Air Step Pump** .....$1

### HAIR CUTTER IS MONEY SAVER

And saves time too! Simple as combing your hair, fewer trips to the barber shop. Safe, sure, neat way to trim necklines, sideburns, without mirror. LADIES: shaves legs, underarms. Standard 2-edge blades, no electric wires.

**8649-Deluxe Hair Cutter** .....$1.98

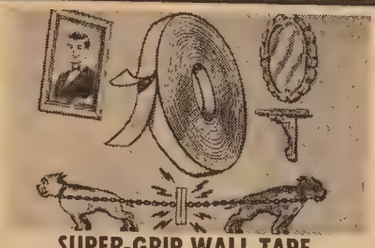
# SAVE MONEY WITH THESE FINE GIFT VALUES



### AUTO DRINKS WON'T SPILL!

Beverage holder attaches to bracket on dash, any flat surface. Beverages in glasses, cups, bottles, cans secure in boats, card tables. No-rust 3" aluminum ring with vinyl supporting straps. Self-stick bracket. Buy!

**8825-Bev. Holder** .....$1.49 2/$2.79



### SUPER-GRIP WALL TAPE

Latest adhesive creation for industrial use now available for the home. Hold tools, pictures, mirrors, without nails. Double-face adhesive sticks instantly to any surface: wood, metal, tile, plaster! 75" roll, ½x16". Great buy!

**4394-Super Tape** .....$1 3 for $2.79

### HANG UP GARDEN HOSE

Without disconnecting it—holder hangs on any faucet. No nails or screws. Standard size hose lifts off to move; ideal for winter storage in garage or cellar. All aluminum, nothing to rust, corrode. Capacity 200 feet.

**4453-Hose Holder** .....$1

### GIANT 12-FT FUN BALLOON

Own the biggest balloon on the block! About as high as the house. Inflates easily with gas or air to 12/18 ft. high. Exciting in backyard, playground, beach. Great for store openings, church bazaars, sporting events.

**6239-Giant Balloon** .....$2.98

### REMOVE TREE STUMPS!

No digging or chopping, just pour stump remover in center of stump, amazing new chemical saturates so stump can be easily removed or burned into ashes. No harm to vegetation, plant life, no trained back, stubbed toes.

**8525-Stump Remover** .....$1.50

### UNDER WATER FISHING VIEWER

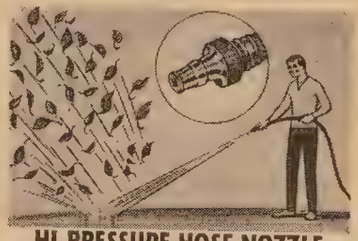
See your fishing catch under water before you haul 'em in! Below surface viewer Aqua-Glasses make glare & reflection disappear like magic! Observe fish holes and weed banks where the really big ones lurk.

**5978-Aqua-Glasses** .....$1

### BACKYARD GYM FOR SQUIRRELS

Watch your bushy-tailed friends frolic, walk tightropes, climb up rope, scamper in & out of buckets —all in your own backyard. Warning bells ring! Comes with 3 ropes, 3 buckets, 58 ft cord, 6 baffle plates, 15 pieces! Fun!

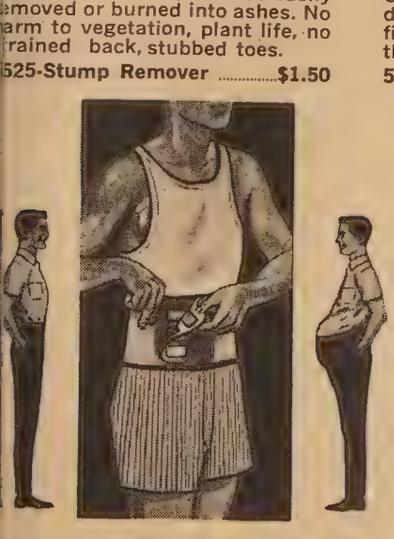
**8679-Squirrel Gym** .....$2.98



### HI-PRESSURE HOSE NOZZLE

Shoots a powerful stream of water, enough to scale a fish, clears sidewalk & driveway in secs. Hi-power fire hose principle can uproot pesky weeds. All brass; automatic shut-off to save steps.

**6649-Hi-Pressure Nozzle** .....$1.49



## Slimmer Waist Line

Wear Slimmer Belt under dress or shirt for support of sagging stomach muscles and enjoy a slim, trim new look immediately. Adjustable from 26" to 50" with instant grip attachment that provides quick comfort, aids in sacro and lumbar support. Elasticized, easy-wash cotton just 7" wide often helps relieve back fatigue, assists in better posture. For men and women.

**6253—Slimmer Belt** .....$3.98

**MAIL 10-DAY NO-RISK COUPON TODAY**

**HILLSDALE ASSOC.** Dept. RR-70, 208 East 43rd Street, New York, N.Y. 10017

Rush me items listed below. I understand if I am not completely satisfied with any item, I can return it within 10 days for a full and complete refund.

| QUAN. | ITEM # | NAME OF ITEM | PRICE |
|---|---|---|---|
| | | | |
| | | | |
| | | Postage & Hdlg.—Add 35¢ for 1st item ▶ | |
| AR60 | | and 25¢ for each additional item. | |
| | | Enclosed is check or m.o. for—TOTAL ▶ | |

NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

# HOBBY CLUB

**conducted by Sy Reich**

RON ZIEL, author of *Twilight of Steam*, is director of the NRHS's Long Island-Sunrise Trail chapter. The group plans to return its Long Island Railroad steam loco, No. 35, to her original appearance and make her operable. To do this, they need two pairs of four-legged marker lights, one pair of four-legged classification lights, and a big headlight, all Pennsy; also a small tender back-up light and a bell. Ron says he has rare glass-plate negatives of D&H and O&W Camelbacks, shot 1903-1912, which he will sell or trade for PRR steam hardware. His address is Box 433, Bridgehampton, N.Y.

Stamp-collecting railfans should know about the Mobile Post Office Society and its bi-monthly *Transit Postmark Collector*. The group also sells many last trip, name-train covers and has auctions of RPO cancels. Membership costs $2.50 a year. Write Edwin Bergman, 5824 Frances St., Omaha, Neb. 68106.

Canadian Railway Museum at Delson, St. Constant, Que., near Montreal, has almost 100 pieces of equipment on its 10-acre site. Included is Canadian Pacific's No. 5935, the last steam loco built for a Canadian mainline railroad. The museum also has a good collection of Montreal trolleys and work cars.

A major contribution to a railfan group has been made by Southern Pacific. Three diesels and one sleeping car plus valuable miscellaneous equipment have been donated free to the Pacific Coast Chapter, R&LHS.

The diesels are an E9, an F7, and an AS-615, the latter being one of the last switchers built by Baldwin. The sleeping car operated as the last car on the *Cascade* between Oakland and Portland. Eight pairs of 33-inch wheels dating from 1889-90, and one 3-wheel velocipede round out the donation.

*The Bulletin*, bi-monthly of the Railroad Station Historical Society, carries articles, photos, and news items on U.S. and Canadian stations. To join, the RSHS, write to secretary-treasurer Sanford Downs, 901 Dale Dr., Lincoln, Neb. 68510; dues are $3 yearly.

The New York Central System Historical Society is a new organization with a self-explanatory title. It plans to furnish members with copies of photos and blueprints as well as supplying general info. on the NYC and subsidiary roads. Membership is $4 a year. Address P.O. Box 2327, Cleveland, Ohio 44110.

Readers can save a lot of time getting their subscriptions to this magazine processed if they send their checks to *Railroad Magazine* Subscription Dept., Portland Place, Boulder, Colo. 80302. Subscriptions sent to our New York office have to be forwarded to Boulder, anyway, which causes delay.

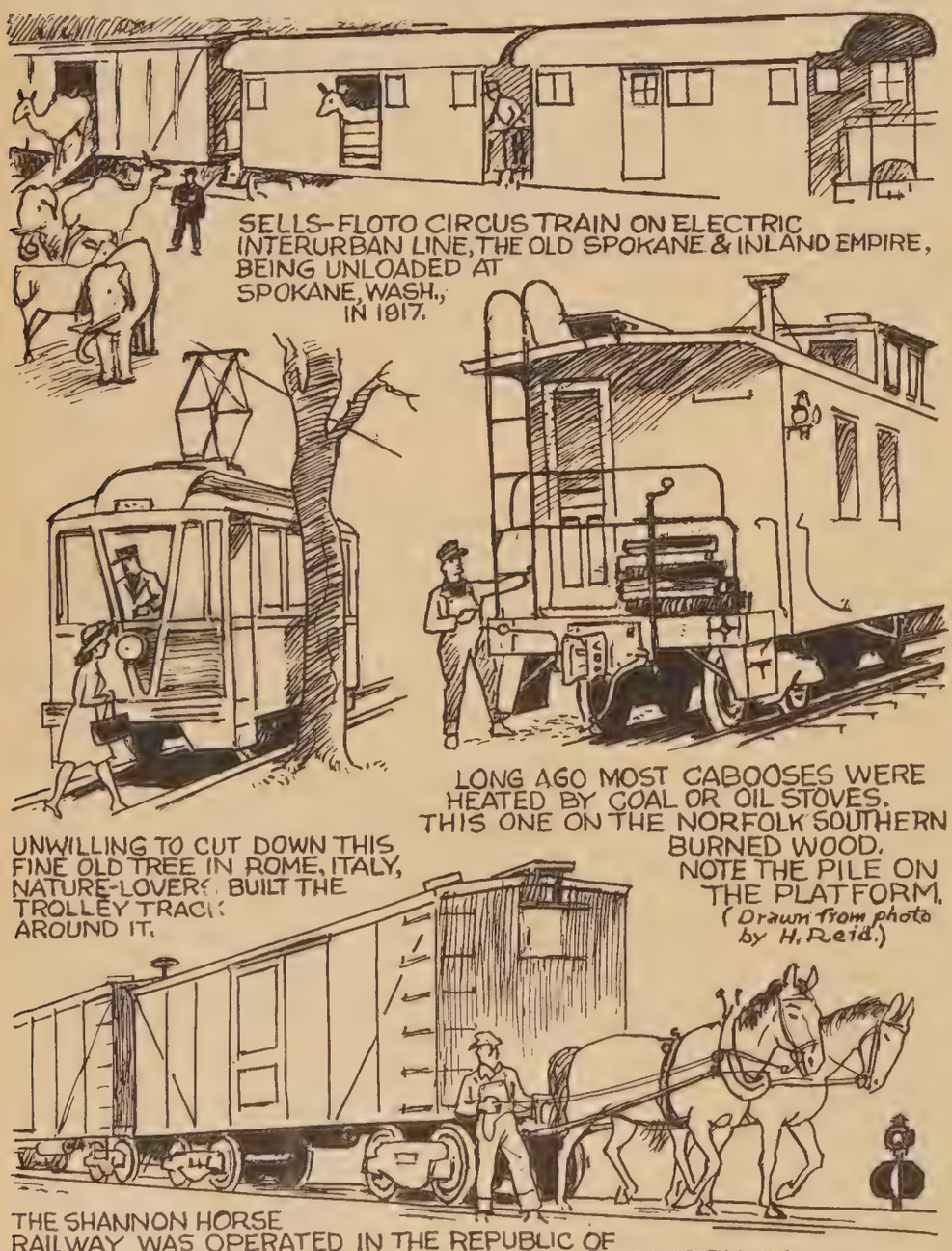
Send back-issue orders, as usual, to *Railroad Magazine*, 205 E. 42nd Street, New York, N.Y. 10017. Back issues prior to 1970 now cost 60¢ apiece.

An organization calling itself the Western Steam Fiends Assn. is planning a one-mile, circular steam line, museum, and pioneer village in Woodburn, Ore. Right now, the "Fiends" are searching for railroadiana to display. Those interested should first mention what they have to offer, enclosing a self-addressed stamped envelope. Write to Al Herman, 38 S.E. 30th Place, Portland, Ore. 97214.

The *Flat Wheel* is the official monthly of Div. 4, Mid-Central Region, National Model Railroad Assn. (NMRA). The latest issue ran 16 pages, printed, much of it dealing with non-model subjects. Annual subscription, $1.75; address 1669 Hawthorne Drive, Mayfield Heights, Ohio 44124.

Baltimore & Ohio Transportation

## ALONG THE IRON PIKE — by Joe Easley


SELLS-FLOTO CIRCUS TRAIN ON ELECTRIC INTERURBAN LINE, THE OLD SPOKANE & INLAND EMPIRE, BEING UNLOADED AT SPOKANE, WASH., IN 1917.
LONG AGO MOST CABOOSES WERE HEATED BY COAL OR OIL STOVES. THIS ONE ON THE NORFOLK SOUTHERN BURNED WOOD. NOTE THE PILE ON THE PLATFORM. (Drawn from photo by H. Reid.)
UNWILLING TO CUT DOWN THIS FINE OLD TREE IN ROME, ITALY, NATURE-LOVERS BUILT THE TROLLEY TRACK AROUND IT.
THE SHANNON HORSE RAILWAY WAS OPERATED IN THE REPUBLIC OF IRELAND AS RECENTLY AS 15 YEARS AGO. WHO CAN TELL US IF IT IS STILL OPERATIVE? (Thanks to Walter McGrath and T. Catt.)

# TAKE ONE

## It could be worth $200,000 to you.

NTS wants you to have one of these 4 catalogs, free. Each one covers a different field of opportunity open to you now. Any one of them can mean an additional income of $200,000 in your lifetime. Maybe a lot more.

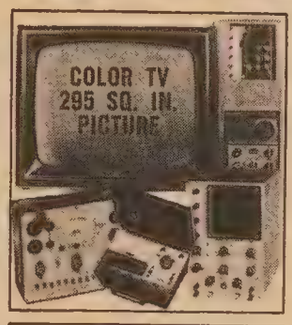
NTS will open the door to this exciting new world — where there is greater income and security than you ever dreamed possible. How? By letting NTS give you the technical skills you need, through home training. There is no better way to become a skilled technician or increase your income potential.

NTS "Project Method" home training makes a big difference. You learn faster and easier — because you train with professional tools and test equipment, included in every course. No extra cost or kit deposits.

Check coupon below for the catalog and home-study course that interests you. There is no obligation.

### Electronics Division

Multiply your income with space age skills in Computer Electronics, Color TV & Radio Servicing, Automation/Industrial Electronics or Electronic Communications. All courses include valuable kits like Color TV, Two-Way Radio Transceiver, Oscilloscope, and more. All at no extra cost or kit deposits. Check coupon for new, free color catalog now!

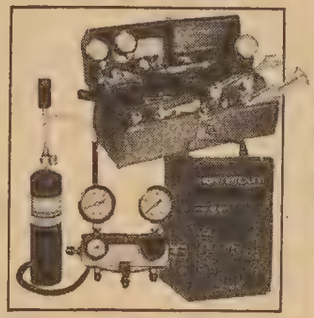



### Mechanics Division

NTS puts you into America's largest industry first. You can start earning almost as soon as you begin. Professional diagnostic test equipment included at no extra cost. Plus bonus "hot shop" lessons. Choose from four big automotive fields. Check below for new, free color catalog, complete details on all courses and equipment.

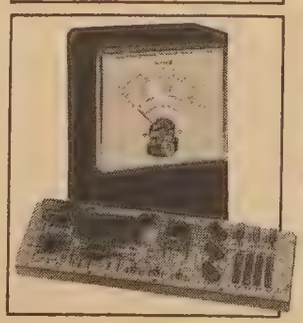
### Air-Conditioning, Refrigeration, Heating Division

Install and maintain today's complex air-conditioning, refrigeration, and heating systems. Be an NTS master technician you can handle any job. Or, you can go into your own business. "Project Method" makes your training interesting with all new tools, tester, and instruments. No extra cost or kit deposits. Send for new catalog. Check coupon today.



### Home Appliance Division

Earn your present weekly salary in a day! You can by professionally servicing ranges, washing machines, dryers, home air-conditioners, and other appliances. Open your own shop, or get a top job with a first-class service company. New, exclusive Circuit Trainer, Circuit Tester, and tools — all included at no extra cost or kit deposits. New catalog. Check coupon, below.



**APPROVED FOR VETERANS**

## NATIONAL TECHNICAL SCHOOLS

**Worldwide Training Since 1905**
**4000 South Figueroa Street, Los Angeles, Calif. 90037**

***High School at Home*** National offers accredited High School programs. Take only subjects you need. Study at your own pace. Everything included at one low tuition. Check special High School box in coupon for full information and free catalog.

***SEND FOR FREE CATALOG & SAMPLE LESSON***

***Classroom Training at Los Angeles.*** You can take classroom training at Los Angeles in sunny Southern California. NTS occupies a city block with over a million dollars in training facilities. Check box in coupon.

Accredited Member National Association of Trade and Technical Schools; National Home Study Council

**CHECK ONE ONLY!** NATIONAL TECHNICAL SCHOOLS
4000 So. Figueroa St., Los Angeles, Calif. 90037

**Please rush FREE CATALOG and SAMPLE LESSON on course checked.**

**Electronics Division**

- ☐ Master Course in Color TV Servicing
- ☐ Color TV Servicing
- ☐ Master Course in TV & Radio Servicing
- ☐ Practical TV & Radio Servicing
- ☐ Master Course in Electronic Communications
- ☐ FCC License Course
- ☐ Master Course in Electronics Technology
- ☐ Industrial and Automation Electronics
- ☐ Computer Electronics
- ☐ Basic Electronics

**Air Conditioning / Refrigeration / Heating Division**

- ☐ Master Course in Air Conditioning, Refrigeration & Heating
- ☐ Air Conditioning & Heating
- ☐ Refrigeration

**Mechanics Division**

- ☐ Master Course in Auto & Truck Mechanics (includes Diesel)
- ☐ Automotive Mechanics
- ☐ Truck, Heavy Duty & Diesel Mechanics
- ☐ Engine Tune-up & Electricity

**Home Appliances Division**

- ☐ Home Appliances Master Technician's Course
- ☐ Home Appliances Servicing
- ☐ Handyman Appliance Repair

**High School Department** ☐ High School At Home

Name_____ Age____

Address_____

City_____ State_____ Zip_____

☐ Check if interested in veteran training under the new GI Bill.
☐ Check if interested ONLY in classroom training at Los Angeles. (Dept. 209-070)

# NOW! AT LONG LAST! THE PERFECT GOLF BALL!

**The PCR-BARTSCH ball has no separate center, rubber windings or cover. Its solid, one-piece construction gives perfect center of gravity. This means long true drives with less hook or slice . . . wonderfully controlled approach shots and deadly accurate putting.**

It can actually trim several strokes from your game. Meets U.S.G.A. specifications!

**GUARANTEED PLAYABLE FOR 180 HOLES! CONFORMS TO U.S.G.A. RULES**

Distance equivalent to the best conventional balls, with the added accuracy and durability inherent in the scientifically designed structure, make the PCR BARTSCH ball **the best value on the market today.**

PCR BARTSCH golf balls are specially priced for this introductory offer. A set of three for $4.00, twelve for $12.00, twenty-four for $20.00, all postage prepaid and all guaranteed playable for 180 holes!

**30 DAY NO-RISK COUPON. MAIL NOW!**

Prove that PCR-BARTSCH golf balls are good for 180 holes, without risk on my part. If I'm not 100% convinced I'll return them "as is" anytime within 30 days for a full refund.

*Name*_____

*Address*_____

*City*_____

*State*_____ *Zip*_____

**Rush postpaid:**

☐ **$4.00 enclosed for 3**
☐ **$12.00 enclosed for 12**
☐ **$20.00 enclosed for 24**

**THE PENTHOUSE, Dept. AN-RR-80**
**205 E. 42nd St., N.Y., N.Y. 10017**

**MADE IN U.S.A.**


Museum, Pratt and Poppleton Streets, Baltimore, Md., has a fine collection of equipment, all from B&O and associated roads. Locos, such as the 1925 Ingersoll-Rand, Alco B+B (ex-Jersey Central) and the *John Hancock*, an 0-4-0 built in 1836, are on display in the 123-foot high roundhouse. The museum is open Wednesdays through Sundays; admission free.

In March we ran an item on Ontario & Western cabooses at the Orangeburg, N.Y., yard. We have since learned that they are unavailable, having been cut up for scrap. Howard Pincus of Rye, N.Y., tells us that an equipment speculator, not the Erie Lackawanna, owned the yard. Now it is used as a parts depot by Chrysler Corp. Jerry Dziedzic of Maywood, N.J., said he saw "some weird things there with O&W lettering on it, the purpose of which is beyond my imagination." He must mean the HT-1 heater car, converted out of steam tender. This equipment once sat in the yard.

Occasionally we get letters from readers who have trouble buying our magazine. Some newsstands and most hobby stores carry it, but if yours doesn't, tell the manager to get in touch with *Railroad Magazine* Circulation Dept. at our New York City address. We will supply your dealer with as many copies as he needs.

Photograph by Virgil C. Staff

**Car 1021 moves up a steep grade through Dolores Park on San Francisco's "J" Line on a balmy summer day in 1967.**

**CAR FURNISHED**

**●**

**EXPENSES PAID**

**●**

**NO PREVIOUS EXPERIENCE REQUIRED**

# f you're looking for a new career that offers action nd challenge; that can pay off in big earnings

# —be an Accident Investigator

***( We'll be glad to show you how )***

Even while you read this, more than 000 accidents, fires, and windstorms are curring across the U.S.A. Insurance and nsportation companies are in dire need men trained to investigate and adjust e thousands of claims that result from ese incidents. Such claims are required law to be settled *quickly*, yet there are ndreds of cities and rural areas where ere are not enough men to handle this al work. This creates a golden spare-ne or full-time opportunity for men.

## College Education Not Required me Companies Waive H.S. Diploma

We are training scores of accident inves-ators by mail and helping to place them the fast-growing, highly profitable Acci-nt Investigating Field. No previous perience is required. A car is furnished; car expenses are paid. Many men earn ile they learn. Only average education equired.

## Some Men Make More in a Day Than They Made in a Week!

Dave Durant increased his income 50 cent, soon as he became an Accident estigator. Bill Waddell's company has en him a fat raise every year. He now a handsome five-figure income. thony Allen, a college graduate and istered pharmacist, switched to Accident estigating and almost doubled his earn-s. Bob Pritchard reports companies in area are offering qualified investigators as much money as college graduates are getting. Read more about these happy men and their exciting new careers in our FREE Brochure.

## If You Prefer to Operate a Business of Your Own

*Even with all the company benefits given Accident Investigators some men prefer to operate their own business. No matter how ideal the job, they want to be "on their own." There are few greater opportunities to do this today than those open to you in the field of Accident Investigating. You can even start with your own home as your headquarters. You have no office rent to pay—almost no overhead. Your chief expense is the investment of a few dollars for stationery, business cards and office record sheets. You can even start in your spare time – keeping your regular job until the day arrives when your spare time income is more than the amount of your present pay.*

## We Help You Find the Job You Want

Only 15 minutes reading a day puts you on the high road to success as an accident investigator. Keep your old job until ready to switch. Many men get their diplomas in a matter of weeks! (We give you FREE Employment Help through our nation-wide PLACEMENT SERVICE—or show you how to start an investigating business of your own at home). Dozens of big companies with job openings are making good use of our monthly graduate list.

## Plenty of Room for Advancement

Let us prove how easily you can quickly switch into this exciting new career that provides prestige, security, a bright future! Sending for FREE Brochure does not obligate you in any way. No salesmen will call. Mail postcard or coupon. Dept. 157 LIBERTY SCHOOL, 162 E. Cook, Libertyville, Illinois 60048. (Liberty School is Approved for Veterans and Servicemen's Educational Benefits under the G.I. Bill.)

Jim Edwards, Director, Dept. 157,
Liberty School of Claim Investigating
162 E. Cook, Libertyville, Illinois 60048

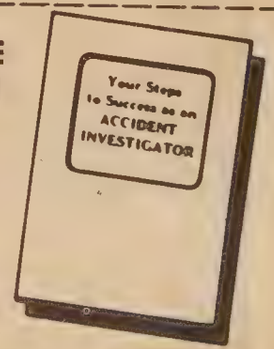
**MAIL FOR FREE INFORMATION**

Send me your FREE Brochure showing how I can quickly get into the Booming Accident Investigating Field and enjoy the job security and professional prestige offered Accident Investigators. This does NOT obligate me in any way and no salesman will call.

Name_____ Age_____

Address_____

City_____ State_____ Zip Code_____



# The Switch List

**We list entries free but without a guarantee. Not over 25 words, including name and address. Use abbreviations: *tts.* (timetables), *emp. tts.* (employes timetables), *SSE* (send 6¢ stamped envelope, if in U.S., for list or details). Your entry will be printed in our first available issue. Address Sy Reich, *Railroad Magazine*, 205 East 42nd Street, New York, N.Y. 10017.**

BEN ALABASTRO, 108 1st Ave., Frankfort, N.Y. 13340, buys NYO&W, NYC disp. sheets, tts., emp. tts. 1920-'40.

WALT ALLEN, Valley, Neb. 68064, will sell 2 steam whistles, oilers, manufactured in 1800's. (SSE)

BOB ANDERSON, 803 E. 1st. St., Iron Mountain, Mich. 49801, sells steam negs. or trades for C&NW, DM&IR, NP, SOO steam negs. No. list.

C.L. ANDREWS, 4231 S.W. 38th St., West Hollywood, Fla. 33023, sells station, steam, diesel, car pix LV, RDG, CNJ, DL&W, PRR, L&NE, Pa., N.J. rrs; list. (SSE)

R.G. ANTHONY, 1320 W. Mason St., Fort Worth, Texas 76110, trades dated crosstie nails.

ROGER ARCARA, 1432 Leland Ave., Bronx, N.Y. 10460, buys NYW&B pix, tts., tkts., etc. (SSE)

DEAN ARNOLD, 1620 Creal Crescent, Ann Arbor, Mich. 48103, will buy 7/57 Trains, recent DT&I, AA emp. tts.

DICK BARRETT, 176 S. Goodman St., Rochester, N.Y. 14607, sells tkts, passes, rulebooks etc., map of U.S. psgr. service routes. (SSE)

G. BOLINSKY, 435 Alameda Ave., Tacoma, Wash. 98466, wants to contact 35mm rail camera fans near El Paso, Amarillo, Channelview, Longview, Texas.

JON BOYLE, Box 171, Keosauqua, Iowa 52565, will sell pin from link and pin coupler; will buy pix streamlined psgr. cars.

SETH BRAMSON, 8035 Cecil St., Miami Beach, Fla. 33141, buys, trades for anything FEC; also, any FL trolleyana, RPO cancellations.

JEFF BRASHARES, 825 Peaceful Path, Mansfield, Ohio, buys info., pix, tts., annual reports, etc. on Colo., Dela. & Marion, Colo., Marion & Bucyrus, Colo. City Lines.

CAL BULMAN, 45 Garden Pkwy., Henrietta, N.Y. 14467, will sell Modern Amer. Ry. Practice Vols. 2-5, 7-10.

H.E. CHELF, 5004 N. Knoxville Ave., Peoria, Ill. 61614, will sell 3½x5" steam pix on L&N, C&EI, MON, NC&SL.

CECIL CHURCH, 216 Rideau Terrace, Ottawa 2, Ont., Canada, buys, trades, orig. Alco, Baldwin, Lima steam bldrs. pix, catalogs.

JIM CLAPPER, 924 Spangler Rd., Canton, Ohio 44714, will sell Railroad Magazine '44-'46.

Mrs. JUNE CLARK, 8 Herbert Dr., East Brunswick, N.J. 08816, buys, trades pix, slides diesels in Vt.

HARRY CLAUSEN, 133-46 122 St., South Ozone Park, N.Y. 11420, sells Xerox copies NYO&W tts., emp. tts. (SSE)

ED CONKLIN, 5 King Arthur's Court St. Janes, N.Y. 11780, sells British Rys. steam loco headlamps, lanterns, marker lts, railroadiana. (SSE)

ELMER COY, 510½ Orange St., Richmond, Ky. 40475, buys info. on rr. tokens, buttons, badges, metal passes.

A.J. CROFUT, 1502 Washington Valley Rd., Somerville, N.J. 08876, will buy DL&W brakeman's kerosene lantern.

R.A. CURRIER, 714 S. 17 St., Corvallis, Ore. 97330, buys, trades RPO cancellations.

LES DAIGLE, RD 1 Box 414C, Shirley, Mass. 01464, buys pix, slides, info. on RUT steam facilities at Bellows Falls, Vt.

JIM DAVIES, 78 Warren Pl., Ridgewood, N.J. 07450, sells back issues Trains, Railroad Magazine, Erie and EL mags; NYC, PRR, LI, Erie tts. (SSE)

R.H. DELLINGER, Box 4095, Birmingham, Ala. 35206, sells rule books, playing cards, switch locks; buys railroadiana.

VINCENT DESANTIS, 196 Carbon St., Paterson, N.J. 02522, sells EL pix; list free.

RAY DESCHENES, 903 Mohawk Rd. E., Hamilton, Ont., Canada, sells 3½x5" to 11x14" steam pix CN, CP; list 30¢. Buys, sells CN, CP, TH&B steam negs.

BRIAN DOWNES, 1228 Carlisle, Racine, Wis. 53404, sells CI&L waybills, telegrams, 1880's to 1900's. (SSE)

GUY DUNSCOMB, 1418 Fordham Ave., Modesto, Calif. 95350, buys, trades for back issues Railroad Magazine '55-69; pre '30 SP emp. tts., pix.

HENRY DUTCH, 315 W. Boston Mills Rd., Peninsula, Ohio 44264, buys WAB railroadiana.

MIKE EURITT, 5016 Springeld Way, Sacramento, Calif. 95350, buys trades for back issues Railroad Magazine '55-'69; pre '30 SP emp, tts., pix.

R.E. FERRIS, c/o Western Maryland Ry., Elkins, W. Va. 26241, trades railroadiana for switch locks, keys.

R.P. FITZGERALD, 603 Woodland Dr., Havertown, Pa. 19083, buys pix, negs. NP psgr. conductors and brakemen in full uniform.

PHIL GILES, 33 Arcadia Lane, Hicksville, N.Y. 11801, sells model rr. mags. '46-'66; no list. (SSE)

C. GOODMAN, 5826 S. Western, Chicago, Ill. 60636, sells telegraph equip., WU signs, etc.

DAVE HALLER, 80 Sunrise Dr., Hawthorne, N.J. 07506, buys NYS&W tts., railroadiana.

FRANK HAMILTON, 509 E. 1st. St., Cumberland, Md. 21502, will sell antique rail collection.

DAVE HAMLEY, 12 LaCrosse St., Pittsburgh, Pa. 15218, sells loco pix, negs; list (SSE)

G.C. HENDRICKS, 345 Lincoln Ave., Brooklyn, N.Y. 11208, will sell a 4 chime brass transit whistle.

BILL HOFFMAN II, 326 S. East Ave., Baltimore, Md. 21224, sells 5x7" pix steam, diesels esp. B&O, PRR. List, 15c.

AL HOOPER, 2703 Princeton, Butte, Mont. 59701, sells new splice bar bolts, 12 rail, track tools, accessories.

RAY JOHNSON, Box 160, Wakefield, Kan. 67487, sells rr. emblem watch fobs; trades for sw. keys, dining car china. (SSE)

HENRY KADYK, 2312 Wetmore Ave., Everett, Wash. 98201, will buy 8/36 issue of Railroad Magazine.

JOHN KEAVY Jr., Box 214, Fall River, Mass. 02724, sells rubber stamps showing steam, diesel, trolley design with or without your name and address. (SSE)

JOHN LARUE Jr., 1102 Elm Ave. West Collingswood, N.J. 08107, buys negs., slides of cabooses, work, wrecking equip.

BOB LAWRENCE, Box 24163, Cleveland, Ohio 24163, sells emp. tts., B&O letters.

G. MACKAY, 60 Maclaren St., Ottawa 4, Ont., Canada, trades 616 negs., Canadian rr. stations.

K. MARSH, 324 Rolling Knolls Rd., Scotch Plains, N.J. 07076, sells size 616 negs. B&O steam; CNJ, LV, EL diesels. (SSE)

JACK MAY, 679 Warburton Ave., Yonkers, N.Y. 10701, buys, trades U.S., Canadian, Mexican tkts., cash fare receipts.

MIKE MCDONALD, 706 Western Dr., Los Angeles, Calif., buys CB&Q diesel pix, tts.

AL MILLER, 3212 34 Ave. South Minneapolis, Minn. 55406, buys movies toy trains, scale model train layouts, train collections, operating accessories.

RALPH MILLER, 742 W. St. Paul Ave., Waukesha, Wis. 53186, sells foreign, U.S. trolley post cards.

WAYNE MONROE, 449 Oakwood Rd., Baltimore, Md. 21222, buys recent WM emp. tts.

DICK MORHARD, 14 Rogers La., Smithtown, N.Y. 11787, sells orig. 35mm slides, negs.; b&w, color pix; bks., railroadiana. List (SSE)

PEGGY MOSER, Rte. 5 Box 322A, Beaumont, Tex. 77706, buys rr. buttons, dated tie nails, insulators.

CARL MUNCK, Lot 20-C, Martin View Trailer Court, Bellevue, Neb. 68005, sells pix, negs. steam, diesel. (SSE)

J.E. MURPHY, 733 Beaverbrook, Baltimore, Md. 21212, buys slides, pix, plans, Va. & Truckee equip.

AL MUTHARD, RD 1, Macungie, Pa. 18062, sells back issues Railroad Magazine. Buys trolley post cards from his area. (SSE)

W.B. NAYLOR, Box 76, Long Pine, Neb. 69217, sells railroad postcards.

H.G. NELSON, 210 W. Clara Ave., Peoria, Ill. 61614, will sell Trains complete through '59, excellent cond.

WARREN NORCROSS, 5411 Whitby Ave., Philadelphia, Pa. 19143, buys elec., diesel loco builders plates.

DON OSIER, RR 1 Box 316, Casco, Maine 04015, trades pix GT, MEC for nthn. New England emp. tts.

RAY OUELLETTE, 389 S. Prospect St., Marion, Ohio 43302, will buy 9/35 Mdl. Railroader; 9/41, 10/41 Trains; Summer '48 HO Monthly.

JOHN PARKER, 1439 Alpine Dr., Aiken, S.C. 29801, trades 2¼x3¼" diesel negs. for trolley negs. esp. SHRT, SF Muni, PRy, KCPS, SLPS, BTC.

J.L. PATY, 115 Oak St., Ashland City, Tenn. 37015, sells b&w, color pix TC. (SSE)

J. PAUFF, 422 Meadows Dr., Glendale, Calif. 91202, buys UP, LA&SL, SI kerosene hand, car inspectors lanterns.

MATT PAUL, 1130 S. Michigan Ave., Chicago, Ill. 60605, will buy Freed's "Story of RR Psgr. Fares."

TOM PEARSON, 1791 Larkspur Ave., Pomona, Calif. 91767, buys B&M, NYN.H&H steam no. plates, bldrs, marker lts.

GENE PERRYNON, Southwick, Idaho 83550, buys insulators.

D. PETERS, 80 Tremper Dr., Wallingford, Conn. 06492, buys 5⅜" 2-color lantern globes.

BILL PLETZ, 3729 Lindhurst Rd., Columbus, Ohio 43220, sells NYC, PRR, PC emp. EMD instruction manuals, OC Divn. dspr. sheets; list (SSE)

GREG PULIS, 48 Church St., Ramsey, N.J. 07446, buys info., pix of Wiscasset, Waterville & Farmington.


## FOR INVESTORS! FOR COLLECTORS!

*The Last "Complete" Silver Set!*

PRESIDENTIAL
**1964 U. S. COIN SET**

with the John F. Kennedy Half Dollar, in attractive, sparkling lucite display holder. Fine memento, important to collectors and investors. Wonderful gift for Christmas, confirmation, anniversary, birthday and other special occasions. A gift that's different and valuable!

*Only* **$2.95**

**1965, 1966. 1967, 1968 COIN SETS also available at only $2.95 for set**

**SPECIAL CLOSE-OUTS ON SILVER SETS FEATURING HARD-TO-GET FRANKLIN HALVES**

| | | | |
|---|---|---|---|
| 1963 Set | $ 4.00 | 1962 Set | $ 4.50 |
| 1961 Set | $ 5.25 | 1960 Set | $ 5.85 |
| 1959 Set | $ 6.25 | 1958 Set | $10.25 |
| 1957 Set | $10.00 | 1956 Set | $11.00 |

*ALL 13 SETS (1956-1968)* *ONLY* **$64.95**

*($75.20 value if ordered separately)*

**FREE! 1969 COIN SET WITH EVERY $64.95 ORDER**

*All coins brilliant and uncirculated.*

*Order today. Send check or M.O. to*

**THE PENTHOUSE**

**THE PENTHOUSE,** Dept. C-RR-80
**205 E. 42nd Street**
**New York, N.Y. 10017**

Enclosed please find $_____ (check or M.O.) for which please send me the following coin sets:

_____ _____ _____

_____ _____ _____

_____

Name .....

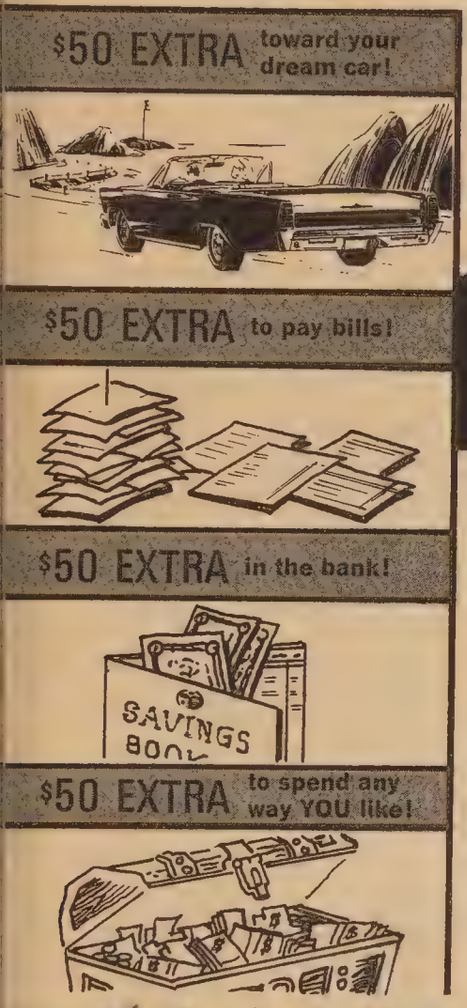
Address .....

City & State .....Zip.....

*(Add 50c for postage and handling)*

# think of all you could do with AN EXTRA $50 NEXT MONTH

## ...then mail the coupon and I'll show you how to get it!



Imagine all the things you could do with an extra $50 next month. You could laugh at taxes and inflation, because *you'd* have money to spare! Well, you can make that much and more. All you have to do is show your friends my giant color shoe catalog . . . and send me their orders. I'll do the rest! You never invest 1c. I'll supply everything you need. You just show your friends our more than 240 beautiful dress, sport and work shoe styles for men and women. Take their orders—often as many as 5 or 6 orders on a Saturday morning alone. Pocket your profits and send the order to me! We stock and ship the shoes. And WHAT a stock. Over 300,000 pairs! Comfortable shoes. Colorful shoes. All the latest styles and fashions. Sizes 4 to 16. Widths AA to EEEE. You name it—Mason has it. Can you show a catalog and fill out orders your friends and neighbors will give you? If you can—mail the coupon for my FREE Color Catalog and you can be making $50 extra before this time next week!

...and **FREE SHOES for LIFE, too!**

Just take as few as 5 orders a month for popular Mason Shoes! That's all there is to it—and you get FREE SHOES FOR LIFE.

STOP SCRIMPING

GO MASON!

**MASON** SHOE MFG. CO., Dept. H-623
Chippewa Falls, Wis. 54729

## RUSH FREE CATALOG

Mr. Victor Mason
MASON SHOE MFG. CO , Dept. H-623
Chippewa Falls, Wisconsin 54729

Rush FREE Giant 132-page *full color* Catalog and confidential profit information so I can start cashing in right away. And be sure to tell me all about those FREE SHOES FOR LIFE!

Name_____
(please print)
Address_____
Town_____ State_____ Zip_____

# SUPERB QUALITY KNIVES

Only a man can really appreciate the superb qualities of Swedish EKA Pocket Knives. They are fashioned to satisfy the demands of men who seek the best. Several past U. S. Presidents have selected these knives for personal gifts.

Each slim knife is of the finest Swedish steel with a carbon content of 0.85% and a chromium content of 14%, hardened to a Rockwell C value of 58-60. Such steel produces the finest possible cutting edge, and every edge is tested prior to shipment. EKA knives are made with all the care and craftsmanship which is expected of quality items subject to everyday use.

The EKA knife represents the ultimate in a thoughtful, personal gift. A genuine leather sheath accompanies each knife.

**A** Etched stainless steel handles, chromeplated and hardened. Large blade, bottle opener, screwdriver, nailfile ..... **10.50**

**B** Genuine lustrous mother-of-pearl handles. Large blade, bottle opener, screwdriver, nailfile ..... **17.95**

**C** Etched with gold/black Swedish coat of arms scrollwork. Large blade, small blade, screwdriver, nailfile ..... **14.95**

**D** Hardened satin finish stainless steel handles. Large blade, small blade, screwdriver, nailfile ..... **13.50**

**E** Mother-of-pearl handles with deep lustrous finish. Small blade, nailfile. ..... **14.95**

**F** Handles etched with Swedish coat of arms with gold/black scrollwork. Small blade, nailfile ..... **11.95**

**GUARANTEE: You must be completely satisfied. All merchandise returnable for full refund within 5 days of receipt.**

**THE PENTHOUSE / Dept. SK-RR-80 / 205 E. 42 / New York, N.Y. 10017**

Enclosed is $_____ ☐ Check ☐ Money Order

Please send me (quantity indicated in box):

☐ A @ 10.50 ☐ B @ 17.95 ☐ C @ 14.95

☐ D @ 13.50 ☐ E @ 14.95 ☐ F @ 11.95

Name _____

Address _____

City State Zip


SCOTT PYLES, Box 213, New Martinsville, W. Va. 26155, buys switchmen's marker lanterns; dining car items; pix circus trs. of '30's, '40's.

GORDON RAMSEY, 408 Adena St., Pasadena, CA 91104, trades rosters N. American rrs., industrial rrs., logging lines, etc; list 12c (SSE)

WAYNE RHEINFELD, 1011 Neilson St., Far Rockaway, N.Y. 11691, buys switch, marker, classification, hand lanterns; globes, belts, headlights, whistles, locks, keys.

L. RICHARDSON, Box 265, Northfield, Ohio 44067, will sell 2 psgr. car light switchboards.

E.M. RODGERS, 46 Temple St., Newburyport, Mass 01950, buys uniform buttons esp. defunct rrs.

WM. RUSSELL, 402 Rochelle Ave., Wilmington, Del. 19804, will buy 9/68, 11/68, 1/69, 3/69 Railroad Magazine; Reid's "Vgn. Ry.".

H.N. SAWYER, 610 Empire Blvd., Rochester, N.Y. 14609, sells brass locks, keys, emp. tts., tts., tickets, lanterns, cards, matches.

FRANK SCHEER, 18 E. Rosemont, Alexandria, Va. 22301, buys pix Va. stations, towers; RF&P, WS, WT, PB&W sw. keys, locks, railroadiana.

OTTO SCHUERER, 3917 N. 51 Blvd., Milwaukee, Wisc. 53216, buys, trades postcards of ry. depot, logging locos.

D.T. WILLMOTT, 15 Drayton Rd., Pointe Claire, Que., Canada, buys pix South Wind, 1955, with L&N, FEC locos; Royal Palm, 1960 with NYC, SOU, locos.

CHUCK WLODARCZYK, 5246 N. McVicker Ave., Chicago, Ill. 60630, sells 3½x5 to 16x20" pix, Chicago trolleys, CSN&M, steam; list, sample 25¢.

LUCIEN DAUPHINAIS, 7509 Berri St., Montreal 327, Canada, is a RR and trolley fan; has been paralyzed for three years. Collects trolley, train postcards; railroadiana.

A.L. DOMINY, Office of the Chaplain, Naval Construction Battalion Center, Port Hueneme, Calif. 93041, wants RR teaspoons, other silverware; trades lanterns, silverware, keys, buttons, menus.

ARTHUR FRAKES, 3921 4th St., Port Arthur, Texas 77640, will sell railroad menus, buttons, tts.

BOB GREENAWALT, 3643 N. Rosemead Blvd., Rosemead, Calif. 91770, has pre-1900 annual passes in exchange for defunct RR stock certificates.

FREEMAN HUBBARD, c/o Railroad Magazine, 205 E. 42nd St., New York, N.Y. 10017, will sell one copy ea. of "Steel Trails to Santa Fe" (rr. history), by Waters, 500 pages, illust. (1950), $3.50; "Pioneer Railroad" (history of C&NW) by Casey-Douglas 334 pages, illust. (1948), $3; "Railroading the Modern Way," by Farrington, 305 pages, illust. (1951), $3; all good cond.

JIM SEACREST, 2101 Birchwood, North Platte, Neb. 69101, buys negs. CB&Q BN diesels; CB&Q owned psger. cars in GN, NP colors; want list available.

ERNEST SEVDE, Box 107, Toledo, Iowa 52342, sells railroadiana, books, negs., passes, switch keys; buys railroadiana.

A.R. SHADE, 9831 Aldridge Dr., Columbia Station, Ohio 44028, sells, trades pix, b&w slides MTC taken in '54; list, sample 25c.

AL SHARP, 100 Shennecossett Pkwy., Groton, Conn. 06340, sells NYC, PRR, B&M, NYNH&H, CV, MEC tourist guides, tts; lists 25c each.

JIM SHAUGHNESSY, 479 8th Ave., Troy, N.Y. 12181, sells slides, postcards, 8x10" color pix D&H PA's; list (SSE)

DWIGHT SHELBY, 138 N. 33rd St., Camp Hill, Pa. 17011, will sell lot of 86 used LP steam records, good cond. (SSE)

J.E. SIMPSON, 5444 E. St., Clair, Indianapolis, Ind.; sells railroadiana, mags., tts., emp. tts., pix, Off. Guides. (SSE)

L.G. SIMPSON, 26 Valleyview Dr., Dayton, Ohio 45405, sells NYC, C&O, D&RG, PRR whistles; PRR, SOU, B&O trust plates, bells, no plates. (SSE)

BOB SMITH, 712 S. 8th St., Coshocton, Ohio 43812, buys 8x10" color pix, negs., NKP 759 on Centennial tr.; negs. NKP steam with 4-digit W&LE nos.

JOE SNOPEK, 37 Kellogg St., Granby, Mass. 01033, buys negs., slides, data on; NYNH&H diesels, elecs.

BURRELL SPIETH, 509 E. 7th St., Centralia, Ill. 62801, sells pix CB&Q 2-B-2 4967 from orig. 8x10" neg.; sells post card sets. (SSE)

ED SPODOBALSKI, 1538 E. Ohio St., Pittsburgh, Pa. 15212, buys PRR emp. tts.

BILL STAUSS, 4609 Waukesha, Madison, Wis. 53713, trades, sells dupl. slides, pix CN&W power, psgr. equip; buys C&NW slides, pix, railroadiana.

R. STUHR, 87 Sherburn Dr., Hamburg, N.Y. 14075, buys, trades lanterns, switch keys; wants DL&W, LV, NYO&W items.

MEL SWANSICK, 6430 Xavier Ct., Arvada, Colo. 80002, sells AT&SF, BN, C&S, D&RGW, MP, CRI&P, UP action slides; list (SSE)

WALLY SWANSON, 5729 27th Ave. N.E. Seattle, Wash. 98105, buys steam, elec. neg. collections; trades size 616 negs., 35mm slides NP, CMSP&P, GN.

BILL THOMASSON, Box 2248, Anchorage, Alaska 99501, sells "Railfan's Guide to AK-Yukon Area".

DICK THOMPSON, 417 E. Byrd Blvd., Universal City, Texas 78148, buys switch keys, rr. stocks, bonds, emp. tts., rulebks., dining car silverware.

HOWARD TURK, 58 Lake Ave., Lancaster, N.Y. 14086, will sell 2 CN no. boards. (SSE)

MIKE VARNEY, 2968 W.A., Torrington, Wyo. 82240, will sell "Encyclopedia of Railroading" '10, "Science of Rys.", '03.

BOB VENSEL, 1827 Underwood Ave., Huntington, W. Va. 25701, buys back issues Railroad Magazine, RMC, Mdl. RRer, MDL. Trs., Toy Trs. rr. postcards.

GEO VESELY, 9132 W. Sycamore Dr., Hickory Hills, Ill. 60457, sells EMD, Alco-GE bldrs. plates, trustee, power plates; list large (SSE)

A. VON BLON, Box 6422, Waco, Tex. 76706, will sell 4 UP, 4 CP menus issued 5/38 during tour of CO School of Mines senior class.

CHARD WALKER, Box 993, Hesperia, Calif. 92345, sells back issues Railroad Magazine '40-'64. (SSE)

LEONARD WALLIS, 12 Lake St., St. Catherines, Ont., Canada, buys, trades rr., airline, ship postcards, postage stamps.

W. WEBBER, 11 W. Colfax Ave., Roselle Park, N.J. 07204, sells ry. guides '58-'67.

WAYNE WEISS, 1414 Horseshoe, Sugarland TX 77478, buys CERA Bulls. 105,107, earliers; "High Iron Holiday"; "Steam in Variation"; C&S condr.'s buttons.

R.H. WERNER Jr., 45 Spooner St., Plymouth, Mass. 02360, sells, trades Koppel ind. rr. equip. bldrs. plates, 3 varities '10-'20, '20-'30, '30-'50.

DON WOODWORTH, 719C George St., Belleville, Ill. 62221, buys negs., orig. 35mm slides, emp. tts. of NYNH&H locos, equip., facilities.

EARL YORKE, 27257 Currier, Dearborn Heights Mich. 48125, sells IT tts. mint cond. from '39, '48-'50; other interurban tts; list (SSE)

GARY ZEITLER, 339 Winthrop St., Toledo, Ohio 43620, wants pen pals.

WAYNE SCHENK, Box 195, West Seneca, N.Y. 14224, will sell train orders, 1897 to date; also sells other railroadiana; list, 10¢.

GREGG SPINDLER, 135 Capen Blvd., Amherst, N.Y. 14226, wants to contact teen-age railfans in his area.

# Free MEMBERSHIP IN THE BLACK DRAGON FIGHTING SOCIETY

**as a special bonus for ordering early. Your own authentic identification card will be rushed to you absolutely free!**

## "THE DEADLIEST MAN ALIVE"

Bringing to you these forbidden and secret fighting arts is the Supreme Grand Master of all the fighting arts — Count Danté who won the World overall Fighting Arts championship (Master & Expert Divisions) after defeating the top Judo, Boxing, Wrestling, Karate, Gung Fu, Aikido, etc. masters in 'Death Matches'. On Aug. 1, 1967 the World Federation of Fighting Arts crowned the Count — "The World's Deadliest Fighting Master."

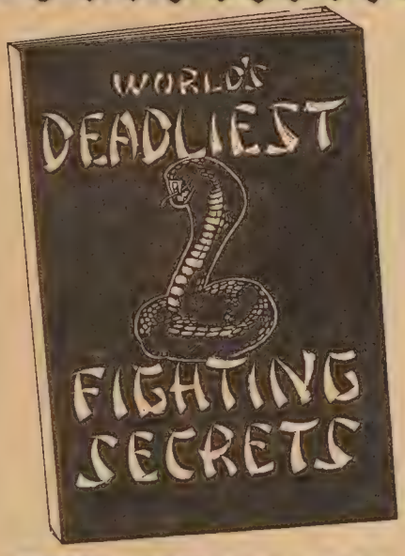
**NOW**

The World's Deadliest Fighting Secrets can be yours!...
The Supreme Grand Master of the BLACK DRAGON FIGHTING SOCIETY brings you the forbidden secrets of...

# DIM MAK

## "The Death Touch"

in this exclusive book!




### BLACK DRAGON FIGHTING SOCIETY

The BLACK DRAGON FIGHTING SOCIETY is the WORLD'S DEADLIEST FIGHTING ORGANIZATION which has included in its closed membership the top fighting experts of the DREADED CHINESE TONG SOCIETY — the oriental, and more vicious counterpart of the Mafia. Its members, who are the world's top Masters in the oriental fistic and grappling arts, train in the most SECRET and FORBIDDEN aspects of the DEADLY Chinese fighting arts of GUNG FU, TAI CHI CHUAN, CHUAN-FA, KEMPO, HSING YI, PA-KUA, SHAOLIN BOXING and DIM MAK.

Until recently the forbidden training secrets of the society have been closely guarded by the members who were sworn to secrecy and joined together thru their **initiation ceremony of blood.** Breaking of the oath to secrecy meant **death by torture** to the offender.

Now for the first time their FORBIDDEN SECRETS OF TERROR can be shared with you.

### BREAK A BRICK

Included in the manual is a GUARANTEED method of brick and board breaking enabling anyone to break a brick or board after only minutes of training. THIS IS NO EXAGGERATION. THERE IS NO TRICK OR GIMMICK. There is nothing to be held in the hand, or any hand brace needed; and no special stunt bricks or boards are needed. This is the same method that many famous Karate Masters use.

### POISON HAND

Considered by many as **evil** and **cruel;** the **lethally savage ripping, tearing, slashing, clawing** and **gouging** techniques which comprise the POISON HAND ARSENAL are used to attack (by strike, touch or pressure) the nerve centers, pressure points, major blood vessels and vital organs of the body. You will learn the original 77 "POISON HAND" techniques of ancient China in actual photographs showing them in application. These are not photos of drawings, but actual photos of COUNT DANTE applying these **torturing** techniques which are meant to **maim, disfigure, cripple** or **kill** and have been used by oriental terrorists and assassins to MURDER!

### OUR $10,000 GUARANTEE

We cannot guarantee to make you a Fighting Arts Master or even an expert, as this is up to you; but we can make a $10,000 GUARANTEE that this book is DEADLIER than any other book, manual or course ever printed anywhere, at any cost and that it was, as mentioned before, refused for past publication due to its extremely FEROCIOUS nature. We also guarantee that the "WORLD'S DEADLIEST FIGHTING SECRETS" contains the most SECRET and FORBIDDEN **attack** and **defense** methods ever devised by man and that the DIM MAK and POISON HAND techniques are completely authentic and the WORLD'S DEADLIEST FIGHTING FORMS.

## THIS BOOK CAN SAVE YOUR LIFE!

The FORBIDDEN and SECRET training manual of the BLACK DRAGON FIGHTING SOCIETY has never before been available to anyone outside of the Society. Recent attempts for regular publication and public exposure have been rejected as the contents were considered HORRIFYINGLY DANGEROUS and BRUTALLY VICIOUS.

Yes, this is the DEADLIEST and most TERRIFYING fighting art known to man — and WITHOUT EQUAL. Its MAIMING; MUTILATING, DISFIGURING, PARALYZING and CRIPPLING techniques are known by only a few people in the world. An expert at DIM MAK could easily kill many Judo, Karate, Aikido and Gung Fu experts at one time with only finger tip pressure using his murderous POISON HAND WEAPONS. Instructing you step by step thru each move in this manual is none other than COUNT DANTE — THE DEADLIEST MAN WHO EVER LIVED.

**MAIL GUARANTEED NO-RISK COUPON NOW!**

**BLACK DRAGON FIGHTING SOCIETY, Dept. 251-70DM4**
**Box 423, Union City, New Jersey 07087**

Rush my copy of **"The World's Deadliest Fighting Secrets"** in plain wrapper immediately. I enclose full payment of $4.98 and there will be nothing to pay on delivery. If for any reason I am not satisfied, I may return the book in 7 days for a full refund. I pledge never to use the deadly techniques of the manual as an aggressor (only to defend myself) and will never abuse the trust placed in me.

**Name** _____

**Address** _____

**City** _____ **State** _____ **Zip** _____

**As a special bonus for those ordering early an authentic I. D. card (silver thermographed on black) of the Black Dragon Fighting Society will be sent — while they last.**

# DUET BRIDGE

**A NEW PARKER BROTHERS GAME**

Leave it to famous Parker Brothers to bring you a two-handed bridge game that offers sound help for the novice and good fun for the expert.

- ♠ Every bit as enjoyable as the actual four-handed game!
- ♦ Clever, slotted plastic holders take the place of partners—each player can see his dummy hand but opponent cannot.
- ♥ All regular bridge rules apply.
- ♣ Handsome deck of plastic-coated cards included.

ONLY $3.50 ORDER BY MAIL USE THIS COUPON

THE PENTHOUSE, Dept. DB-RR-80
205 East 42nd Street
New York, N.Y. 10017

Enclosed is check or m.o. for $_____. Send:

_____ DUET BRIDGE GAMES @ $3.50
(add 75c post. & handling each—Canada add $1.25)

NAME _____

STREET _____

CITY _____

STATE _____ ZIP _____


## Model Trading Post

HAL ASHLEY, 41 Anderson Ave., Scarsdale, N.Y. 10583, buys Louis Marx trains, handcard.

BRUCE BLACK, 3235 E. Euclid Ave., Boulder, Colo. 80303, buys Suydam CMSP&P, GN-Z-1 electrics; Tenshodo GN 2-8-8-0 unpainted, NP 4-6-6-4; Fujiyama NP 4-8-8-4, A&LM 4-6-0;

CHAS. ELLIS, Elcho, Wis. 54428, buys model steam loco, models of trolley car, toy elec. trolleys.

C. FEATHER, 442 Salvini, Pittsburgh, Pa. 15243, will trade Max Gray O scale C&O 2-6-6-6 for Max Gray Big Boy; will sell Walthers 0 gage B-B elec.

RON LEITCH, 18707 Ferncliffe Ave., Cleveland, Ohio 44135, will sell AF .std gage 4677 mts., body, chassis, or trade for 392E front truck.

BILL DENNIS, 5352 29 Ave. S., Minneapolis, Minn. 55417, sells Lionel, AF catalogs '40-'65; buys pre '30 std. gage, tinplate trs.

TAL ORR, Box 66, Dublin, Ga. 31021, buys Lionel, AF, Ives elec. trs., accessories, catalogs.

T.J. PELLETIER, Palouse, Wash. 99161, will buy 12 pr. 0 gage tinplate switches, 100' tinplate 0 gage trk., 50 AF psgr., frt. cars with hand couplers.

MAURICE SAARI, 209 E. Park St., Marquette, Mich. 49855, will sell ¼" scale desk model DSS&A 2-8-0 number 704.

## Additional Roster Notes

Additions to our South Carolina Shortlines roster (May '70) come from W. Calloway, W.T. Morgan, and New Haven Trap Rock Co. Note 21 should read: H&B 42 sold to Alexander, renumbered 3 (8/61). H&B 43 sold to Geo. R. Silcott and Michael Schiavone & Sons, then to New Haven Trap Rock Co., renumbered Branford Steam RR. 6.

To our Clinchfield roster should be added No. 250, a 1500-hp GM-EMD F7B, obtained from Louisville & Nashville in Feb. '69, where it was numbered L&N 723. Clinchfield 853 was traded to L&N for it. Clinchfield 853 became L&N 723 (2nd). Add to Clinchfield roster units 3009-3014, 3000-hp GM-EMD SD40's, built in 1969. Clinchfield 857, 861-862 were traded to GM-EMD for new power.

Add to Carolina & Northwestern roster units 2743-2744, 200-hp GM-EMD GP38's, built in 1969, and unit 2338, a 1500-hp GM-EMD SW1500, built in 1970. Add to note 4 the words: These units not lettered C&N. C&N 4394-4395 were traded to GM-EMD for new power.

To Lancaster & Chester roster add unit 60, a GE 70-tonner, about which we know no more. Piedmont & Northern 1000-1005 were renumbered Seaboard Coast Line 225-230; P&N 1600-1609 renumbered SCL 1250-1259; P&N 2000-2001 renumbered SCL 1238-1239, when P&N was merged into SCL July 1, 1969.—Sy Reich. ●

## Pen Pals Wanted

Sharon Hamilton (19), 26645 California St., Indianapolis, Ind.

Michael Lowe (21), 604 Texas, Wharton, Texas 77488, wants to hear from male or female fans of SW roads.

Albert Herskovits, 205 East 42nd St., New York, N.Y. 10017, wants to hear from fans of Maine railroads.

Randy Dutton (18), P.O. 926, Wallace, Idaho 83873.

Richard Paige (25), 715 Meridian St. Ext., Groton, Conn. 06340, wants pen pals from northeastern U.S.A.

John M. Pollack (14), 2940 West Thomas St., Chicago, Ill. 60622, wants to hear from railfans, especially modelers.

Grace Smyth (62), General Delivery, Vancouver, Wash. 98660.

Wendy L. Gilmore (14), 1015 15th Ave., Rock Island, Ill. 61201.

Donna Foster (18), 8040 Rosswood Dr., Citrus Heights, Calif.

Susan Driver (16), 7006 Valeriana Ave., Citrus Heights, Calif. 95610.

Pfc. Billly Hudson, 460-84-4788, Co. C, 1-46 196th Bde., APO San Francisco, Calif. 96374.

Joe Ima Uwagbdi-Okunbor (22), 173 Bamgbosr St., Lagos, Nigeria.

Helen June West (18), P.O. Box 114, Morgantown, Ind. 46160.

John Casey (62), 1711 First Ave., New York, N.Y. 10028.

Frank Donovan, longtime contributor to *Railroad Magazine*, one of our *Interesting Railfans*, and author of various railroad books, has a critical illness and needs cheer-up letters and cards. His address is 114 W. 45th St., Minneapolis, Minn. 55409. ●

## Coming Events

July 12-25: Mexican rail trip, special Pullmans to Laredo, Monterrey, Mexico City, Guadalajara. Fares, $465 up; lv. from Oklahoma and Texas. Contact Howard B. Thornton, 2936 Bella Vista, Midwest City, Okla. 73110.

July 24-Aug. 3: "Cariboo Country Adventure," sponsored by Pacific Coast chapter, R&LHS. Lv. Bay Area on *Cascade*, go to Vancouver, Jasper, Prince Rupert; fares, $405 up. Contact Arthur Lloyd, 974 Pleasant Hill Road, Redwood City, Calif. 94061.

July 25: Bangor & Aroostook fantrip from Northern Maine Jct. to CPR interchange at Brownville Jct., plus planned tour of Derby shops. Write Downeast Railroad Club, Box 285, Brunswick, Me. 04011.

July 26: "Seagull Special" over Belfast & Moosehead Lake, Belfast to Burnham Jct., Me.; photo stops, chicken barbecue; sponsored by Downeast Railroad Club (address above).

July 26-Aug. 14: "Pacific Northwest Adventure"; lv. Chicago July 26 aboard private sleeper Chief Illini on North Coast Limited. Trip goes to Yellowstone Natl. Park, Old Faithful, Seattle, Skagway (special trip on WP&Y), Prince Rupert; fare, $950-$980. Contact Illini Railroad Club, P.O. Box 62, Champaign, Ill. 61820.

August 16: "Triangle Limited" on B&O using air-conditioned Budd Railcars; lv. Silver Spring, Md., to Baltimore (visit B&O museum), Harpers Ferry, Winchester. Contact Dixon Lines, Box 1691, Rockville, Md. 20850.

Sept. 2-23: "Railfans Extravaganza in Britain"; lv. Montreal; features English steam tourist lines, narrow-gage railways, trolley museums, Manx Electric, sightseeing tour of London, etc.; fare $569 incl. all air and rail travel, hotel. Contact McGregor Travel Co., 3 Place Ville Marie, Montreal, Que., Canada. ●

## Sale of Railroadiana Is Popular

BRITISH RAIL stores controller William Kirby had a bright idea of salvaging and selling discarded railway equipment. So far this year he has made the equivalent of $60,000 from auctions and private sales, one sixth of it coming from a Californian looking for authentic decor for a San Francisco restaurant to be called "Victoria Station."

Mr. Kirby opened in London a collector's corner in an old warehouse, which during its first week of business saw some 500 rail buffs spend up to the equivalent of $2,080 on anything from a penny station staff button to a huge enamel sign reading "The Royal Scot departs daily at 10 from platform 13."

One man bought a large clock under which he used to meet his fiance. A North Country woman snapped up the former station sign for Tyldesley because it was her husband's birthplace; and a Yorkshireman paid the equivalent of $52 for a faded photograph of an 1895 locomotive autographed by her designer.

The racks in the warehouse appear to be cluttered with dirty and dusty junk. Closer inspection, however, reveals stamped silver-plated dishes, cutlery, and toast racks, firemen's shovels, old crockery, and laundry baskets, all of it decorative and useful.

Old oil lamps, coated in copper plate, proved so popular that they sold out the first few days and had to be reordered.

An American bought all of the 500 signs offered for sale. Signs included "Ladies Waiting Room," "No Smoking," "Gentlemen," "Engines must not pass this point," and "Passengers must cross the line by the bridge." All proceeds are paid over to British Rail. ●

# FINE QUALITY LUGGAGE AT UNBEATABLE PRICES.

Short haul or long haul, your preference will be handsomely accommodated by these fine luggage items. Obvious appeal is matched by obvious economies through DIRECT SHIPMENT FROM OUR FACTORY TO YOU. All luggage items fashioned of genuine Tolex (a product of General Tire & Rubber Co.) Tolex Expanded Vinyl is soft and supple, completely waterproof and scuff-proof, will not crack or peel, and is fabric lined. Tolex outlasts leather 4 to 1. All items stitched with nylon thread throughout. All zippers are easy-slide solid brass.

## FOLDING SUITCASE: $8.25

Extremely rugged and durable, yet the last word in practicality. Folds flat for easy storage and is quickly opened to measure 21″ x 14″ x 7″ for abundant packing space. In quality Tolex vinyl, heavy grip handle and solid brass zipper. Brown or bone.

## EXECUTIVE CLUB BAG: $8.50

A handsome club bag in scuff-proof quality Tolex with full lining. Sturdy loop handles, solid brass buckle and zipper. Holds a complete variety of gear for club, sports or travel. Rivals bags selling at three times the price. Size: 18″ x 10½″ x 11″. Brown or bone.

## HIDEAWAY BAG: $7.50

An all-purpose durable travel bag with an indispensable hidden lower section that unzips instantly for added space when needed. Bag measures 17″ wide by 12″ deep. Just open bottom zipper and hidden section of bag drops down. Now your bag is 19″ deep! Made of scuff-proof, waterproof Tolex. Brown or bone.

## CAMERA BAG: $7.75

A camera bag handsomely suited for the most expensive equipment. Attractive and long lasting Tolex vinyl with all brass zipper. Room for all that treasured photo equipment, yet compact and easy to tote with shoulder strap. A perfect gift for camera fans. Size: 10½″ x 5½″ x 9″. Brown only.

## Guarantee

**We guarantee your complete satisfaction. All merchandise returnable for full refund within 5 days of receipt.**

**THE PENTHOUSE Dept. L-RR-80 / 205 East 42nd Street / New York, N.Y. 10017**

| Quantity | Item | Brown | Bone | Price | Total |
|---|---|---|---|---|---|
| | Folding Suitcase | | | $8.25 | |
| | Executive Club Bag | | | 8.50 | |
| | Hideaway Bag | | | 7.50 | |
| | Camera Bag | | X | 7.75 | |

Please include 50¢ per item for handling and shipping.

Enclosed is $_____ ☐ Check ☐ Money Order _____

Name _____

Address _____

City _____ State _____ Zip _____

Get into a Good Paying Career!
Help Bring Crooks to Justice
Through Scientific
CRIME DETECTION

TRAIN AT HOME TO BE A
FINGERPRINT
TECHNICIAN

OVER 800 BUREAUS OF IDENTIFICATION EMPLOY IAS GRADUATES

*You are needed now to help keep pace with the fantastic increase in crime! Prepare for a fine, well paying career that offers security and steady advancement!*

Yes — There is good money in Scientific Crime Detection and Fingerprint Identification . . . but much more than money alone! Imagine the thrill of being on the team that apprehends a vicious criminal . . . possibly a remorseless killer . . . by modern, scientific means. Trapping him . . . helping build an air-tight case with hard, undeniable facts you've helped dig out! This is what fills the job of CRIME INVESTIGATOR with daily excitement . . . in addition to good steady pay, security and advancement opportunity.

Just as I've helped hundreds of other ambitious men get into CRIME INVESTIGATION . . . I can help you, too. At home in your spare time, I will reveal and train you in the secrets of modern Crime Detection, Fingerprint Identification, Firearms Identification, Handwriting Identification, the art of "Shadowing" . . . and the other skills that the trained Criminal Investigator uses in his daily assignments.

It doesn't matter what you are doing now . . . what kind of jobs you held before . . . there is wide open opportunity for the trained Crime Investigator.

Our graduates are leaders in Fingerprint-Identification-Investigation departments in every state and all over the free world. Over 800 Identification Bureaus employ our former students. IAS is accredited by the National Home Study Council. Rush coupon for "Blue Book of Crime"—Free!

*Approved for Veterans Under The G.I. Bill*

**FREE** - *Famous* BLUE BOOK OF CRIME

Just mail coupon for this exciting book . . . filled with famous crime cases and crime facts. Tells how you can find success and security in Crime Investigation. Send for your FREE copy today. No salesman will call. (Give your age, please).

**INSTITUTE OF APPLIED SCIENCE**
*A Correspondence School Founded in 1916*
Dept. 3007, 1920 Sunnyside, Chicago, Ill. 60640

Mr. T. Dickerson Cooke, *Director*
INSTITUTE of APPLIED SCIENCE, Dept. 3007
1920 Sunnyside, Chicago, Ill. 60640
Without obligation send me the Blue Book of Crime (latest edition) and list of Identification Bureaus employing I A S students and graduates together with complete facts and easy terms offer.

Name_____ Age_____
Address_____
City_____
State_____ Zip Code_____


## SISTERS OF THE ROAD

*By Cliff Maxwell*

IT WAS in a hobo jungle on the outskirts of Ogden, Utah, that we met. It was when I was on the bum, fifty years ago. I had built a little fire and was making Mulligan stew while waiting for a westbound rattler when a woman suddenly seemed to pop up out of nowhere, doubtless lured by the savory aroma, and she drifted over to the fire.

I studied her curiously. She was in that uncertain period between youth and middle age. Tanned by years of exposure, alert and muscular, clad in dirty, shapeless khaki jumpers, with features wrinkled by wind and sun, she still boasted a certain feminine charm. Her low husky voice had an appealing quality while her clear blue eyes barely betrayed a lack of innocence.

Her first words were, "Looks as if I landed just in time for swill." So saying, she grabbed up a convenient tomato can, dipped it into the stew and then, in an imperious manner, jostled me aside while she poured herself a "crock uh Java," as she elegantly styled a can of black coffee.

Even then I didn't know who she was, but I could give a pretty good guess. My guess was Boston Betty. Just about everybody on the open road knew Boston Betty. Her tall tales of personal exploits were notorious. Her deep-sea profanity had become tradition. Hoboes and trainmen alike were familiar with the name and reputation of Boston Betty. I made bold to ask if, indeed, that's who she was.

The stranger gave me a scornful glance between gulps of Mulligan and Java. "Uh course," she snorted. "Who'n hell ja t'ink I was, Joan de Arc?"

I asked, "Which way yuh headin'?"

She finished eating, with the most perfect lack of table manners I have ever seen in a woman, wiped her mouth on the back of a grimy hand, and replied: "I'm a-head-in' east. Which way you goin'?"

"West," I responded.

"Well, punk," she said, taking a long breath and rubbing her slim belly ecstatically over the spot where the stew and Java had gone, "I'm a-warnin' yah ta keep yer eyes peeled in Reno. Them railroad bulls'r hostile as hell. I had a lousy time gittin' outta there—but damn their hides, I made it."

Other sisters of the road shared dubious honors with Boston Betty during her era. Like Betty, they had little that was softly feminine. They were tough by-products of cities that had no place for them.

On a single westbound drag I counted females by the score: old women, girls in couples or unattached, even children traveling with their families, and dames riding alone or with their husbands or casual lovers.

It was not a pleasing sight. But one phase of it was encouraging. Instead of the hobo-baiting attitude which I had experienced from trainmen and railroad bulls, I found to my surprise that the men of the rails in 1932 were more humane, more kindly, more cooperative, particularly toward the feminine wanderers.

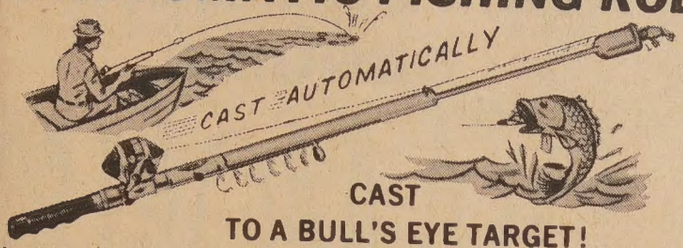
It was not unusual to see a brakeman conduct a bevy of skirts to a boxcar, order every man aboard to find another car to ride in, and then help those "lady hoboes" inside and make them as comfortable as possible, sometimes even sharing lunches with them.

Morality was sternly insisted upon. Many a time I saw a trainman step into a group of hoboes and arbitrarily take a girl out of it and conduct her to a boxcar or the caboose and make sure she was not molested. Such incidents, however, occurred only when the girl was obviously stranded amid strangers and in need of protection from male advances.

In all my years of wandering I encountered but very few girl hoboes who were frankly immoral. ●

# Save Money With These Fine Gift Values!

## RIFLE-ACCURATE CASTING with AUTOMATIC FISHING ROD




**CAST TO A BULL'S EYE TARGET!**

Aim for a spot, then press the trigger for casting up to 80 feet away! Like a bullet, your line zooms to the area. Perfect to hook the really big one who always seems to get away. No more worries about backswing on crowded pier, busy boat or under tree limbs. Now you can angle without cramping your style. Great for fishermen who love the sport but should not over-exert by casting. Relaxation at its best. Fiberglass and aluminum 42" long. Fits all spin-casting reels.

**6924—Automatic Fishing Rod ..... $10.98**

## WHY SPEND A LOT FOR AN EXTRA PHONE?
## Standard Dial Phones - only $9.95

**COMES WITH 4-PRONG PLUG READY TO PLUG IN AND USE!**

**SAVES EXTRA STEPS AND COSTLY RENTAL CHARGES**

These reliable phones are hard to beat — sturdy reconditioned Western Electric and Stromberg-Carlson dial phones at about one quarter normal retail cost. Rewired, refinished and equipped with standard plug ready to use in home or office, they are a solid value, make it possible to have a phone in every room (cost less to own forever than what you'd pay to rent for 3 months), only $9.95. Two make a fine intercom only $18.85. Color Dial Phones only $13.95; 2 for intercom, $25.95 — Specify choice; D0203 White, D0201 Beige, D0202 Ivory, D0204 Red, D0205 Green, D0206 Blue.

## Shape-Up Wheel... Slims Down In 5 Minutes A Day!

Just roll the wheel . . . firm muscles and tone your system. Now you can achieve results in just a few minutes a day. Almost like magic you'll notice tummy and back muscles begin to tighten, arms, chest and abdomen will slim down. Roll your way to a better figure, better posture and better health. No more strenuous exercise . . . just roll away!

**8102—Shape-Up Wheel ..... $2.98**

**A Real Jewel Among Swiss-made Watches**

## WORLD FAMOUS PILOT'S CHRONOGRAPH

**COMPLETE WITH 6 DIALS, 5 HANDS AND 2 PUSHBUTTON CONTROLS**

**only $12.95**

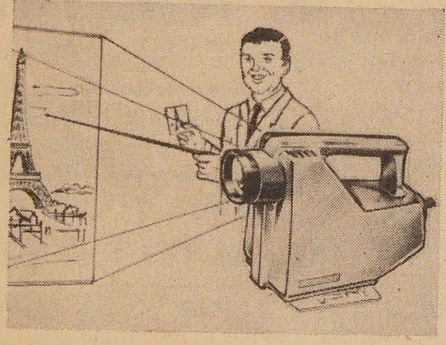
- Measure Distance
- Register Speed
- Use As Regular Stop Watch
- Check Production Figures
- Time Athletic Contests
- Check Parking Meters

This is a gem, first made famous by World War II pilots who found it an absolutely accurate timepiece and versatile instrument —and it still is! Whether you like to fly, or drive sports cars, record your average speed per mile, or time the number of beers consumed in an hour, this will do the job. Completely machine calibrated, manufactured and assembled in famous watch factories in Switzerland. It is shock-resistant, anti-magnetic, has an unbreakable mainspring, big sweep second hand, luminous dial and hands, golden finished die-cast case and leather strap. This is truly an outstanding value and fully guaranteed for one year.

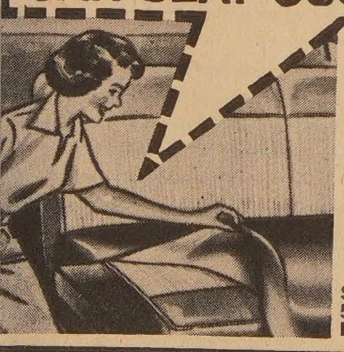
**Z-4042—Chronograph Watch ..... $12.95**

**PROJECTOR ENLARGES TO 4 FEET IN COLOR TOO.** Enlarge any illustrated material up to 4 ft. wide. No films, negatives needed. Magazines, newsapers, snapshots, stamps, all project clearly in color or black & white. Uses house light bulb. Adjustable lens. Handy carry case, 12" x 8" x 4½". Every boy or girl will treasure this projector!

**2517—Projector....$7.98**



## 100% NYLON FOAM STRETCH CAR SEAT CUSHION-COVER



Slip-on nylon foam covers for your car go on as easily as a pillow case. Handsome 100% nylon resists rugged, everyday wear and stains—car interiors keep like new. Stretch covers fit snug—no creases or bunches. Foam underside padding adds comfort and snug fit. They s-t-r-e-t-c-h to fit front or back seat cushions, one size fits all. 100% washable. Pick color of your choice.

**Seat Cover $3.98 Order: 5414-Blue; 5415-Charcoal; 5416-Green; 5417-Red; 5418-Brown**

## MAIL 10-DAY NO-RISK COUPON TODAY!

**HILLSDALE ASSOC. Dept.RR-70 208 East 43rd St., New York, N.Y. 10017**

Rush me the following. I understand I can return anything in 10 days for a prompt refund. Enclosed check or m.o. for $_____.

___ 6924 Automatic Fishing Rods @ $10.98 (Add 95¢ post.)
___ 8102 Shape-Up Wheels @ $2.98 (Add 65¢ post.)
___ 2517 Projector @ $7.98 (Add 75¢ post.)
___ Seat Covers @ $3.98 (Add 55¢ post.)
Order by #_____.
___ 4611 Standard Dial Phones @ $9.95 (Add 95¢ ea.)
___ Sets of 2 Phones @ $18.95 (Add 95¢ post. ea.)
Order by #_____.
___ Color Phones @ $13.95 (Add 95¢ post. ea.)
___ Sets of 2 Color Phones @ $25.95 (Add 95¢ ea.)
Order by #_____.
___ Z4042 Chronograph Watch @ $12.95 (Add 65¢ post. ea.)

NAME_____

ADDRESS_____

CITY_____ STATE_____ ZIP_____

IF YOU'RE IN THE MILITARY SERVICE

YOUR CREDIT IS GOOD

# GIVE YOUR LOVE A GENUINE DIAMOND

**ROMANTICA**
8 Glittering Diamonds in 14K gold. Both Rings $139.00 $6.00 twice monthly

**LONDON**
Flaming Diamond in 14K gold. His & Hers Trio. All 3 rings $139.00 $6.00 twice monthly

**ELESIA**
Brilliant Solitaire in 14K gold. Both Rings $149.00 $6.00 twice monthly

**MERCURY**
Sparkling diamond & synthetic birthstone in 10K gold masculine mounting. $129.00 $6.00 twice monthly

**MOONBEAM**
9 fiery diamonds in 14K gold. His & Hers Trio. All 3 rings $169.00 $8.00 twice monthly

**ANGORA**
7 Blazing diamonds in 14K gold. Both rings $199.00 $8.00 twice monthly

**APPOLLO**
Dazzling diamond in mans 14K gold mounting $159.00 $8.00 twice Monthly

**HAPPINESS**
13 glittering diamonds in 14K gold. His & Hers trio. All 3 rings $199.00 $8.00 twice monthly

**MAJESTIC**
8 Fantastic diamonds in 14K gold. Both rings $249.00 $12.00 twice monthly

**BLUE STAR**
Linde Blue Star Sapphire with 3 flashing diamonds in 14K gold. $200.00 $8.00 twice monthly

Ring illustrations enlarged to show detail.

## NO DOWN PAYMENT

15 DAY FREE TRIAL - LIFETIME GUARANTEE

**SHIPPED IMMEDIATELY VIA AIRMAIL**

MAIL COUPON TODAY

NO AGE LIMIT — NO RED TAPE

If coupon clipped, send order to:

UNITED DIAMOND SALES
Dept. AM-2, P.O. Box 48518
Los Angeles, Calif. 90048

NO INTEREST OR CARRYING CHARGES

Clip out—wrap finger—mark line at arrow point—mail with coupon.

RING SIZE

UNITED DIAMOND SALES • P.O. Box 48518 • Los Angeles, California 90048
Dept. AM-2

Please rush: Name of item_____

Ring Size: Lady's_____ Man's_____ Type of Stone (Birth Month) _____

I will pay $_____ Twice Monthly or $_____ Monthly

My Name _____ Rank _____

Complete Military Address_____

APO or City_____ State_____ Zip_____

Serial No._____ Discharge Date_____

Social Security No._____

Home Address_____

City_____ State_____ Zip_____

Sweetheart or Wife's Name_____

Her Address_____

City_____ State_____ Zip_____

Send Merchandise to ☐ Me ☐ Sweetheart or Wife

MY SIGNATURE_____ CX2

## $40,000 First Year

**"In our first calendar year we did a gross of $40,000. Without constant help from the Duraclean home office such growth never would have been possible."**

**M. L. Illinois**

## Security-Prestige- and Profits

**"National Advertising and Duraclean prestige are very important. This year I will double last year's gross. For the first time in 20 years I've got security—without fear of losing my factory job. I gross about $8.50 an hour on the job."**

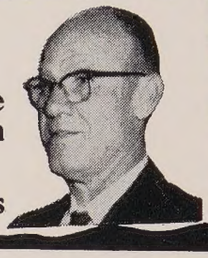
**H. P. Ohio**

## $2,880 in One Month

**"I took in $2,880 in April. I worked from my home. My wife handles all telephone calls. We both enjoy our new found independence and the compliments we get from satisfied customers."**

**J. F. A. Texas**

## $360 Job Finished in one day



**"I did the Sorority House in one day for $360. This business is in its infancy."**

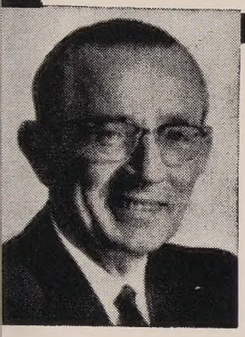
**H. L. B. Texas**

## $116 for 6 Hours Work

**"I have done hotels, studios, restaurants and churches. That is where the big money is. Example: One Saturday, $210 in 11 hours. Monday, $116 in 6 hours. I have also contracted to clean 80,000 square feet of carpet for a store for $4,000."**

**G. F. Wisconsin**

**FREE BOOK tells how these people—and hundreds of others—got started in this Big Money business. Send for your copy now.**



# Let me give *you* the same start I gave these men!

In one way, the big earnings reported here might be called exceptional. In another way, there is nothing exceptional about them. That's because any man who will follow instructions and is willing to work at his own Duraclean business should be able to do as well under similar conditions.

Each of the men quoted here had talents and abilities different from those of all the rest. *But each had one thing in common*—a desire to win personal independence in a business of his own. And each man took five identical steps to reach his goal. 1. Each one read an announcement such as you are reading now. 2. He wrote for complete information. 3. He read the literature we sent him. 4. He gained new confidence in himself and the belief that he could succeed with Duraclean. 5. He accepted our offer to help him get started. Later, he wrote to tell us about his success.

In each case, remember, *the first step was to write to Duraclean for information.* If you would like to own a business of your own, why don't you do as these men did—*right now.*

When I hear from you, I will send you facts about the Duraclean Franchise that will open your eyes. You will see why a Franchise business such as ours makes success for the individual the rule rather than the exception.

The Duraclean home service business has been tried and tested. The market for Duraclean Service is tremendous—and growing. The methods that lead to success have been clearly charted. When an ambitious man follows these methods, success is the logical result.

Some Franchise businesses require investments as high as $50,000. With ours, you can get started for less than a $1000 and we finance the balance. Monthly payments are so small that the profits on less than one day's service can cover your payment for the entire month. Even with this small investment and operating as a one man business, your potential is $250.00 a week net profit. With two men working for you 35 hours a week, you should gross a profit of $420.00. Allowing 20% for advertising and incidentals, the net would amount to $336.00.

The most important part of Duraclean home service is cleaning rugs, carpets and upholstered furniture by a revolutionary modern process known as the "Absorption Method." You do the work right in the customer's premises. No harsh scrubbing with motor-driven brushes. No soaking. Instead, an aerated foam loosens the dirt and holds it in suspension until removed. A test conducted by an impartial laboratory showed that the modern Absorption Method removed twice as much dirt as was removed by old fashioned machine scrubbing.

If you are tired of working for others or of jumping from one proposition to another—if you have a real yearning for independence in a business of your own—then send for "The Duraclean Route to Success." There is no obligation—no charge. No salesmen will call to high pressure you. Send for the book now. Read it. Then if you want to take the next step toward independence, you can write to me and let me give *you* the same help I've given so many other successful men.

PRESIDENT

**DURACLEAN COMPANY**

**0-707 Duraclean Building, Deerfield, Ill. 60015**

Mr. Ford Marsh, President
0-707 Duraclean Building, Deerfield, Illinois 60015

Please mail a copy of your Free Book that tells how I can get a Duraclean Franchise started in spare time without giving up my present income. No charge. No obligation. And no salesman is to call on me.

Name_____

Address_____

City_____ State_____ Zip Code_____

# FREE

## Everything you need to start your own profitable shoe and clothing business

### No Cost to You

Complete free starting outfit puts you in your own business immediately. No experience needed. No investment—now or ever. You can represent us full-time or part-time.

### America's Largest Selection of Shoes

More than 550 different styles for men, women and children. Many with exclusive Ortho-Vent Spring-Step Cushion construction. Earn up to $18 on just one order.

### All-new Collection of Fashions

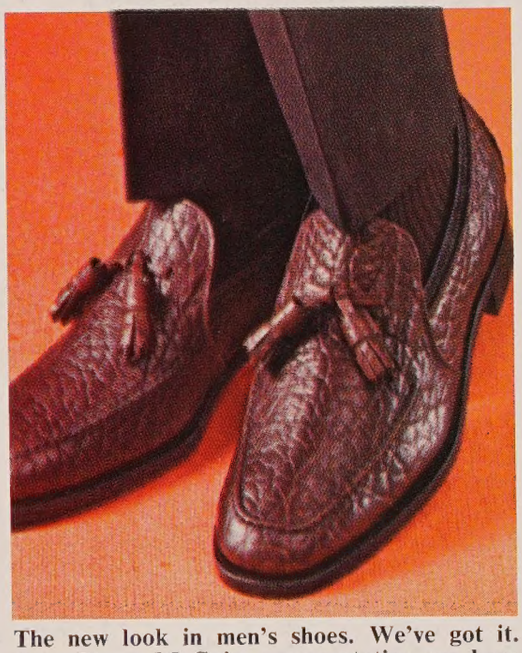
Stuart McGuire has just introduced a fantastic collection of men's and women's fashions to make money for you. Here is your new opportunity to own your own profitable family shoe and clothing business.

### You make money 8 ways

Immediate cash commissions, free life and health insurance, free bonds for retirement, free gifts, free shoes and clothing, monthly cash bonus, free Green Stamps *and* a free franchise that lets you build and manage your own sales team.

**Everything for every man: sweaters, slacks, sportcoats, hosiery, shirts, rainwear. You make money because you have what he wants.**

**Exclusives for women. Fresh, exciting, fast-moving dresses, pantsuits, blouses. Fashions that are up-to-the-minute.**



**The new look in men's shoes. We've got it. As a Stuart McGuire representative you have a size and a style to please everyone.**

**Hundreds and hundreds of new shoe styles—bold new pumps, comfortable flats, imported sandals—all in your free catalog.**

# Free shoes and clothing for yourself

We'll put you in your own business absolutely free. Show you how to make money by taking orders from others. Immediate cash commission on every order. And you save money by ordering for yourself and your family at special discounts. No experience needed. No obligation.

## Big, New Catalog

Just printed. Almost 300 full-color pages of shoes and clothing fashions for men and women.

**FREE Catalog Starting Outfit. No obligation.** 053007

To Cabell Brand, President
The Stuart McGuire Co., Inc.
115 Brand Road Salem, Virginia 24153

**Rush me my catalog outfit free. My shoe size is _____.**

Name _____

Address _____

City _____ State _____ Zip _____